

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

6430.2 CHG. 38

4/7/97

SUBJ: MINUTES OF DOD/FAA JOINT RADAR PLANNING GROUP (JRPG)

- **PURPOSE.** This change transmits Attachment 80 to Order 6430.2, Minutes of DOD/FAA Joint Radar Planning Group (JRPG). This Attachment is the minutes of JRPG meeting number 80 conducted November 19-21,1996.
- DISTRIBUTION. This change is distributed to the branch level within Airway Facilities Service; Assistant Administrator for Civil Aviation Security; Office of Communications, Navigation and Surveillance Systems; Air Traffic Service; Office of System Architecture and Program Evaluation, in Washington; to the branch level in the regional Airway Facilities and Air Traffic divisions; to the branch level at the FAA Logistics Center; and to supervisory level at all air route traffic control centers and all radar sites.
- FILING INSTRUCTIONS. File this attachment immediately following Attachment 79 of this order.

Program Director

for NAS Operations

.

MINUTES OF DOD/FAA JOINT RADAR PLANNING GROUP (JRPG) #80

NOVEMBER 19-21, 1997

DAYTONA BEACH, FLORDIA

MINUTES OF DOD/FAA JOINT RADAR PLANNING GROUP (JRPG) #80

NOVEMBER 19-21, 1997

DAYTONA BEACH, FLORDIA

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1. ADMINISTRATIVE ITEMS.

- a. The Federal Aviation Administration (FAA) hosted the 80th formal meeting of the Joint Radar Planning Group (JRPG) in Daytona Beach Florida, during the week of November 18, 1996.
 - b. JRPG #80 list of attendees is at Attachment 1.
 - c. The current DOD/FAA address list is at Attachment 2.
 - d. An updated list of FAA Regional JRPG Coordinators is at Attachment 3.
 - e. A list of DOD/JRPG Coordinators is at Attachment 4.
- f. The Logistics Subgroup was convened. Cochairmen are Mr. Richard Jorgensen, SM-ALC/LHEP for DOD, and Mr. Randy Means, AML-610 for FAA. The logistics subgroup briefed the JRPG meeting and did not provide a written report.
- g. The Radar Network Subgroup was not convened. Cochairmen are Mr. Rob Paul, ATR-110 for FAA and SMSgt Bob Silverio, interim DOD cochairman during the absence of Maj. Debra Skelton.
- h. The Radar Analysis Software Subgroup (RASS) was not convened. Mr. Lanny Clelland, 84 RADES, is the DOD Cochairman and Mr. John Gonzales, FAA/AOS-520, is the FAA Cochairman.
- i. The Communications Subgroup has had several working sessions to continue working toward resolution of various TELCO room issues and spacing for future equipment installations such as FAATSAT. The results of their actions are reflected under Communications, Section 8, item b. Cochairmen are Mr. Ed Wormley, ACC/SCCD, for DOD and Mr. Sam Krishnan, AOP-400 for FAA.
 - j. The dates for the next JRPG are:

In-House JRPG
Formal JRPG

October 21-23, 1997

December 9-11, 1997*

*The JRPG formal meeting for 1997 will be hosted by USAF.

The following items document discussions during the JRPG meeting. Items preceded by references were discussed in previous JRPG meetings. The first two digits in each reference indicate the meeting number. The alphanumeric after the hyphen indicate the paragraph in those particular JRPG minutes. Those items without reference are new items

discussed by the JRPG. Several action items are closed, yet some minor actions remain to be completed. Offices of Primary Responsibility (OPRs) assigned are as indicated and are responsible for ensuring remaining actions are completed.

2. JRPG GENERAL

- a. <u>Introduction.</u> Mr. John G. Mauck, FAA/AOP-300 introduced Mr. Stanley Rivers, FAA/AAF-1, who officially opened the 80th formal meeting of the Joint Radar Planning Group (JRPG). Mr. Kenneth Kingsmore, ACC/XPP-JRPG, lead the introductions of all personnel present.
- b. <u>Coordination</u>. The JRPG cochairmen reemphasized the need for coordination, communication, and cooperation between all personnel associated with the joint use program. Attendees were reminded that JRPG policy dictates any action which affects a joint use site must be coordinated with all concerned. Also, all were reminded that any intent to change/modify/alter joint use site configurations/operating procedures, etc., must be formally submitted to their respective counterparts and/or headquarters.
- c. <u>Coordination/Problem Solving Chain.</u> Updated FAA/USAF/Navy JRPG coordination chain and problem solving flow diagrams were briefed. Briefing copies provided to attendees and are not included.
 - d. Briefings. The following briefings were provided during JRPG #80.
- (1) Frequency Spectrum Reallocation. FAA/ASR-1 provided information relative to the recent transfer of federal spectrum to the private sector. This transfer impacts the Joint Surveillance System (JSS), since a portion of the frequencies involved in the transfer included a 10Mhz range of frequencies that are in the Long Range Radar surveillance allocations. The loss of 10Mhz directly impacted the ARSR-4 due to the limitations placed on its frequency hopping capability. Additional impacts may be felt as more frequencies are reallocated to the private sector.
- (2) <u>JRPG Background Briefing</u>. The DOD JRPG Cochairman presented a briefing which provided the history of this program, its congressional mandate, scope, and organizational structure. Also depicted in this briefing were the geographical locations of the joint use sites, with a breakout of those which are military only. The subject briefing is at Attachment 5.
- (3) <u>Air Sovereignty Briefing.</u> NORAD/J3WS provided an overview briefing of the NORAD mission including air defense, air sovereignty, and command and control. This briefing identified JSS as the backbone of the Air Defense System by providing a comprehensive radar and communications network. Briefing is at Attachment 6.

- (4) <u>FARR Status Briefing.</u> AND-440 provided a status briefing of the ARSR-4 contract. Each FAA regional coordinator gave a short status of the sites with their region. Since the status changes rapidly, a copy of the briefings will not be included in these minutes.
- Quality Feedback. There were 10 joint technical inspections performed this year. First Air Force presented a review of these inspections. Overall radar, beacon, common digitizer, and Mode IV processors were in very good condition and provided reliable service to support the DOD and FAA missions with the exception of a high number of radio maintenance deficiencies found in the Western Air Defense Sector (WADS). Key performance parameters for the USAF radios were found to be out of tolerance, radio equipment was dirty at some locations, and at some sites the USAF Technical Orders (TOs) did not have the latest changes or were missing. There were some concerns that FAA is not meeting 60 day suspense on processing the reports. Briefing is at Attachment 7.
- (6) <u>FY 95 Radar Evaluation and JSS Involvement Briefing.</u> The 84 RADES presented an overview of the tasks they performed over the past year in support of the JSS sites. The briefing provided details of evaluations performed, site surveys completed, participation in ARSR-4 contractor testing and base line results at ARSR-4 sites. Briefing is at Attachment 8.
- (7) <u>Periodic Radar Evaluation Program (PREP)</u>. The 84 RADES presented a Periodic Radar Evaluation Program briefing. The Radar Data Interface System (RDIS) has been developed and installed at each of the Air Force Sector Air Operations Centers. Its primary purpose is to enhance the Air Force's ability to assess the performance of its radar systems through the present PREP program. They provided an overview of sampling techniques, sampling results, and performance measurements. A copy of the briefing was provided to all attendees at the meeting and is not included.
- (8) <u>FAA Telecommunications Satellite Program</u>: FAA/AOP-400/500 provided a briefing of the FAA Telecommunications Satellite Program (FAATSAT). The briefing provided a description of the program, the operational services that can be provided, and proposed installations at ARSR-4 sites. The FAATSAT program office will be conducting site surveys at several ARSR-4 sites in preparation for installation. Copies of the briefing were provided to all attendees at the meeting and are not included.

3. RADAR EVALUATION / INSPECTION / ANALYSIS / CERTIFICATION.

a. Item 79-3a, 78-3a, 77-3.a, 76-3.a, 75-3.a, 74-3.c, 72-3.c, 71-3.b(3), 70-2.d(4), 69-2.f(5): Technical Inspection Handbook (6040.6E). Order 6040.6E has been revised, and issued Oct. 1, 1995. The revised order defines the objectives of the technical evaluation program. The JTI Task Force held a meeting in September to finalize the Key

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Performance Parameter count and checklist. Specific guidance for conducting Joint Technical Inspections (JTIs) are outlined in Appendix 2 of the order. JTIs will remain on a three-year cycle, final reports are due within 60 days of completion of the inspection, old forms are eliminated, and key performance parameter count are included. Briefing is at Attachment 9.

OPR: FAA/AOP-200

1 AF/SCL

FAA JRPG Coordinators

DOD JRPG Coordinators

CLOSED

b. Item. 79-3b, 78-3b, 77-3b, 76-3.b, 75-3.c, 74-3.e(2), 73-3.e, 72-3.e, 71-3.d, 70-2.f, 69-2.h, 68-2.a, 67-3.bb: Inter-Agency Ground Inspection Manual Revision. A new draft order has been prepared and is currently being circulated for review.

OPR:

FAA/AOP-300

OPEN

c. <u>Item. 79-3c, 78-3c, 77-3.d.</u> Radar Analysis Software Subgroup (RASS). The working group comprised of FAA and 84 RADES representatives have developed new radar analysis software. Two briefings were presented by the RASS on plans for use in analyzing radar data. One system is the En route Radar Data Intelligent Tool (E-RIT) which is designed to record radar beacon data. The E-RIT system was developed to meet FAA needs which differ from those required for USAF. The second system is the Radar Data Interface System which provides 24 hour recording and assessment capability of all radar sites data received by the Air Force Sector Air Operations Centers. Future actions of the RASS will be briefed on a periodic basis as developments warrant. Copies of these briefings were provided at the meeting and are not included.

OPR:

84 RADES/DO

FAA/AOS-500

CLOSED

4. MAJOR PROGRAMS.

a. Item. 79-4.a, 78-4.a(2), 77-4.b, 76-4.b(1), 75-4.b, 74-4.b(1), 73-4.b, 72-4.b, 71-4.b: Letter of Agreement (LOA) for Key West 3D Radar. A joint DOD/FAA Letter of Agreement (LOA) has been prepared for the continuance of FAA maintenance of the Key West radar site after the installation of the ARSR-4. This agreement is complete and will be signed by January, 1997.

OPR

FAA/ASO-472 NAVAIRSYSCOM/5515

SEADS/SC

CLOSED

- b. CI-13 Remote Rekeying (Formally know as FIRRS)
- (1) Item. CI-13 Remote Rekeying Program: The FAA Air Force Radar Replacement program (FARR) Icelandic Remote Rekeying System (FIRRS) name has been formally changed to FARR CI-13. The FARR CI-13 program was briefed by ESC/TNN. CI-13 is planned to be installed at the 3 Sector Air Operations Centers (SAOC), 30 JSS sites and 8 GATR. The equipment will be field tested in the late spring or early summer of 1997 between SEADS/SAOC as the control site and two radar sites. The radar sites will be Tyndall AFB, FL and Lake Charles, LA. (See related items below and at 10.d.) Excerpts of the briefing are at Attachment 10.

OPR: ESC/TNN

OPEN

(2) <u>Item. FARR CI-13 Operational Concept:</u> 1AF/DOYR was tasked to develop and coordinate a CI-13 operational concept. The operations community is to complete formal approval for three additional CI-13 sites (Bootlegger Ridge, MT; Finley, ND; and Remsen, NY) along the northern tier. Funding and hardware for the additional sites have not been identified.

OPR HQ ACC/DOY/DRC NORAD N/J3W 1AF/DOYR

OPEN

(3). Item. 79-4.b, 78-4.c, 77-4.d, 76-4.d: CI-13 Maintenance Concept. A new maintenance concept is being developed and will be coordinated within the FAA/USAF. Funding for maintenance training has been identified

OPR:

HQ ACC/SCCJ HQ ESC/TNN

OPEN

OPEN

(4). <u>Item. CI-13 Installation Sequence</u>: The 1AF/DOYR and FAA/AOP-300 was tasked to prepare a installation sequence for implementation of the CI-13. The SAOC equipment needs to be installed in conjunction with the first radar site within the associated control area. GATR sites will be installed after all JSS sites are completed. A draft sequence was discussed at the meeting.

OPR 1AF/DOYR FAA/AOP-300

/AOP-300

c. Item. 79-4.c, 78-4.d, 77-4.e, 76-4.e, 75-4.d, 74-4.d; New MOA. NAT -914, to Replace NAT-614 in the ARSR-4 Timeframe. NAT-914 is to be implemented on a site by site basis per Article XIII. Upon full implementation of the ARSR-4, NAT-914 replaces NAT-614. JSS sites not modernized with ARSR-4 are to be addressed in a separate appendix to the NAT-914 agreement. Copies of NAT-914 have been distributed to JRPG members.

> OPR HQ ACC/XPP-JRPG FAA/AOP-300-JRPG

CLOSED

d. Item. 79-4.d. 78-4.e: Radome Replacement Program. The FAA presented a briefing which gave an update of the Radome Replacement program. The majority of the radomes have been replaced with the remainder expected to be completed by January 1998.

OPR:

FAA/AND-440

OPEN

e. <u>Item. Long Range Radar in NAS Architecture</u>: FAA/ASD-140 provided a briefing of the National Air Space (NAS) Architecture which provides a "blueprint" for changing the future of the NAS. Particular emphasis was placed on the role of long range radars services in the NAS. The 1993 decision memorandum which advocated the shut down of primary long range radars in the NAS is in the process of being rescinded. A new memorandum will be signed recending the 1993 memo and formally establishing a working group to define the enroute radar requirements for the future. FAA/ASD-100 was requested to formally notify SAF/AQK of FAA's revised position on use of primary long range radars in the NAS. Copies of the briefing were distributed at the meeting and are not included. Copies of the published NAS Architecture are available through FAA/ASD-100.

OPR:

FAA/ASD-100

OPEN

f. Item. Request for Budget Assistance with the ARSR-4 Program: FAA/AND-440 (ARSR-440 Program Office) verbally requested the assistance of the Air Force members of the JRPG in obtaining additional USAF funds to complete the ARSR-4 Program.

OPR: FAA/AND-441

5. JOINT USE SITES.

a. <u>Item. 79-5.a.</u> 78-5.a: <u>Site Configurations.</u> An updated list of joint use site configurations is at Attachment 11. An updated survey of data ties/services provided at contiguous US joint use sites is at Attachment 12. Future configuration charts will be included in Section 1, Administrative Items.

OPR: HQ ACC/XPP-JRPG FAA/AOP-300-JRPG

CLOSED

b. <u>Item. 79-5.b.</u>, <u>78-5.b.</u>: <u>USN Request for FAA Radar Data.</u> US Navy requested radar data from Rainbow Ridge, Mill Valley and, Paso Robles, CA (via Oakland, CA ARTCC). The US Navy funded and installed Codex 3600 modems and have provided land line connectivity. A MOA is awaiting signature by FAA/AWP.

OPR: USN/NISE East Charleston Code-313 SW FAA/AWP-473.9 CLOSED

c. Hawaii.

(1) Item. 79-5.c, 78-5c(1), 77-5.c(1), 76-5.d(1), 75-5.d(2), 74-5.d(2), 73-5.d(2), 72-5.d(2), 71-5.d(2), 70-2.n(2), 69-2.p(5): MT Kokee Beacon Improvements. Contract for engine generators was awarded Feb. 95. Equipment will be maintained by Pacific Missile Firing Range (US Navy). Project has been completed.

OPR: FAA/HIPAFS

CLOSED

d. Alaska.

(1) Item. 79-5.d (1), 78-5d(3): Joint Surveillance System Alaska (JSSA). A joint committee with representatives from the Alaskan Region FAA and 11th AF prepared a draft Joint Alaska Radar System management agreement. It is proposed that this agreement become an Appendix to NAT 914. The draft Alaskan JSSA Appendix to NAT-914 has completed review in FAA headquarters and returned to the region to be prepared in final form. This document will be an Interagency Agreement to be signed by FAA and USAF action offices with contracting officers from both parties completing the agreement.

OPR: FAA/AAL-460

11 AF/DOY

e. <u>Item. 79-5.e</u>, 78-5.f, 77-5.9, 76-5.h: <u>US Navy Request for Jedburg SC. Radar Data.</u> FAA and the SEADS concur with the US Navy's request for data from Jedburg. The Navy equipment has been installed and is operational. Comments were incorporated into the final LOA. The LOA has been signed and became effective Aug. 12, 1996.

OPR:

NISE East, Charleston

FAA/ASO-472

CLOSED

f. Item. 79-5.f., 78-5.g., 77-5.h: USAF Request for Jedburg, SC Radar Data. The USAF thanked the FAA for their support in obtaining the Jedburg radar data. The USAF unit using the Jedburg to Shaw AFB data connection has completed it's mission. The connection has been terminated and all USAF equipment removed.

OPR:

FAA/ASO-472 ACC/SCYA

CLOSED

- g. US Navy Request FAA to Maintain ARSR-4 at two sites.
- (1). <u>Item 79-5.g(1)</u>: <u>Guantanamo Bay Cuba</u>. The US Navy verbally request the FAA maintain the ARSR-4 at Guantanamo Bay Cuba. This will assure continuity of the radar and eliminate the need for the Navy to set up the logistics and training support for a limited number of sites. The JRPG endorses the proposal as an effort that would be cost beneficial to the tax payer. The Navy will prepare a formal request to the FAA requesting maintenance of the Guantanamo Bay radar. No progress to date. The FAA will complete installation through baseline evaluation.

OPR:

USN/NRaDS San Diego

FAA/ASO-472

OPEN

(2). Item 79-5.g(2): San Clemente California. The US Navy request the FAA maintain the ARSR-4 at San Clemente CA. This will better assure continuity of the radar and eliminate the needs for the Navy to set up the logistics and training support for a limited number of sites. The JRPG endorses the proposal as an effort that would be cost beneficial to the tax payer. The Interagency agreement has been completed and is awaiting final signatures anticipated to be signed by April 97.

OPR:

USN/FACSFAC/NRaD

FAA/AWP-473.9

(h) Item: USAF Request for Fort Fisher NC and Jedburg SC Radar Data.

ACC/DOF requested Jacksonville ARTCC provide Ft. Fisher and Jedburg radar data to Shaw AFB, SC. A letter of agreement has been developed, signed and implemented. Funding has been transferred to the FAA. Shaw AFB is currently receiving the radar data from Jedburg. Data will be provided from Ft. Fisher when the new ARSR-4 becomes operational - programmed for the summer 1997.

OPR:

ACC/DOF

HQ ACC/XPP-JRPG

CLOSED

6. EQUIPMENT.

- a. Common Digitizer 2 (CD-2)
- (1) Item. 79-6.a(1), 78-6.a(1), 77-6.a(1), 76-6.a(2), 75-6.a(2), 74-6.a(3): Remote Control and Status Feedback (RACI). The modification developed by FAA is now called the RACI modification. Eight CD-2 sites have been running for over a year with the RACI modification installed without major problems. The RACI package with the MTI modification is scheduled to be released to the CD-2 sites in March 1997.

OPR:

FAA/AOS-500 84 RADES

OPEN

b. Height Finder Radars (HFR).

(1) Item. 79-6.b(1), 78-6.b(1), 77-6.b(1), 76-6.c(2), 75-6.c(2): HFR Removal/Radio Relocation. The ACC/XPP-JRPG provided a status of JSS Height Finder Radar (HFR) removal. There has been no change to the HFR removal program. There are seven sites that will require tower removal after the completion of the ARSR-4 installation. Per the Project Support Agreement (PSA), Ft. Lonesome is programmed to be removed with FARR funds. HQ ACC/SCCJ will identify funds for removal of the remaining towers. Once the funds are identified and a HFR tower is released for removal, the 38 EIS/DRC will schedule a team to accomplish the work.

OPR:

38 EIG/DRC HQ ACC/SCCJ

OPEN

c. Radios.

(1) Item. 79-6.c(1), 78-6.c(2), 77-6.c(2), 76-6.e(3), 75-6.e(3), 74-6.g(3), 73-6.g(5): Secure UHF Radios. This item has been moved to Section 8, Communications, and will be tracked under item 8.b. Tactical Secure Voice.

(2) Item. 79-6.c(2), 78-6.c(3), 77-6.c(5), 75-6.e(6), 74-6.g(6): Fort Fisher MOA. The draft MOA has been coordinated and comments incorporated. The MOA was signed and distributed on 11/18/96.

OPR: FAA/ASO-472

CLOSED

- (3) <u>Item. 79-6.c(3)</u>, <u>78-6.c(4)</u>, <u>77-6.c(6)</u>, <u>76-6.e(7)</u>, <u>75-6.e(7)</u>: <u>AN/GRC-171</u> <u>Training</u>.
- (a) AN/GRC-171 HAVE QUICK Training. AFZ-100 needs to provide guidance on the process for requesting AN/GRC-171 HAVE QUICK training. FAA System Maintenance Office (SMO) managers need to identify their AN/GRC-171 HAVE QUICK training requirements. This training is currently provided by USAF at Keesler AFB MS.

OPR:

FAA/AFZ-100

OPEN

(b) AN/GRC-171 Training. AFZ-100 needs to provide guidance on the process for requesting AN/GRC-171 training. FAA site managers need to identify their AN/GRC-171 training requirements. USAF may need to reestablish classes at Keesler AFB MS providing sufficient requirements are identified.

OPR:

FAA/AFZ-100

OPEN

(4) Item 79-6.c(5): UHF Radios Test and Monitor Panel Replacement. The redesigned Test and Monitor Panel installation is basically complete except for the Northern Tier sites. The GATR sites have not been funded.

OPR:

38 EIG/EICR

38 EIS/DRC

HQ ACC/SCCD

d. FPS-117 3D Radar

(1). <u>Item 79-6.d</u>: <u>Replacement of MT Kokee, HI. Radar.</u> PACAF/DOCO provided a status briefing on the project to replace the existing radar, beacon, and height finder with a FPS-117. The Mt. Kokee AN FPS-117 radar is scheduled to be fully operational in February 1997.

OPR: PACAF/DOCO

ACC/XPP-JRPG FAA AOP-300-JRPG

HIPAFS HIANG

COMNAVAIRSYCOM/PMA-2132

USN/PMRF AWP-473.9

AWP-510

OPEN

7. LOGISTICS.

a. Item. 78-7.b: Transfer of Lake Charles LA FPS-91 Items to FAA. The FAA Logistics Center has requested specific items of the Lake Charles, LA. FPS-91 radar system for their inventory. JRPG Minutes #74, published in July 1991 - approved the transfer of the entire radar to the FAA after decommission. Subject transfer was to be of no cost to the USAF. Recent discussions have surfaced that only portions of the radar were desired by the FAA for transfer. There was an additional request from USAF SM-ALC to recover the arctic radar tower and move it to Hill AFB, UT. The Logistics Subgroup agreed in principle that the FAA Log Center could have the salvageable parts from the FPS-91 radar and that the Air Force Logistic Center could obtain the tower. FAA/AND-440 was tasked to conduct a survey of the site to determine final resolution. The survey report will be published separately.

OPR:

FAA/AML-610 FAA/AND-440 SM-ACC/LHEP

OPEN

8. <u>COMMUNICATIONS.</u>

a. <u>Item. 79-8b, 78-8.d: TELCO Room Configuration Control.</u> The JRPG Communication Subgroup developed a standard TELCO room equipment configuration with design assistance from the 38 EIG/EIC. The Communications Subgroup Cochairmen provided a briefing on the status of the standard TELCO room layout. At locations with non-standard TELCO rooms, i.e., size, location, etc., the configuration will be established as required and approved by the JRPG Communications Subgroup Cochairmen. The

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Telco room configuration final report is available from the Communications Subgroup. The JRPG Cochairmen have accepted the recommendations of the Communication Subgroup. A copy of the Communications subgroup memorandum to the JRPG Cochairmen is included with the briefing in Attachment13.

OPR: FAA/AOP-400

ACC/SCCJ 38 EIG/EICR

OPEN

b. <u>Item. Tactical Secure Voice</u>: This item was previously tracked under Section 6. Secure UHF Radios. UHF radio encryption provides secure voice capability for single channel GAG radios. Phase I, prototype testing, and Phase II installation and testing of production model in the SEADS, have been completed. Phase III will involve the development, installation and testing of Full Communications Service Encryption (FCSE) at the Western Air Defense (WADS), Northeastern Air Defense Sector (NEADS), and Alaska. Installation at Alaska is on-going and estimated completion date is December 1996. The other 2 CONUS sectors remain unfunded.

OPR: 1 AF/SC

OPEN

9. SECURITY.

a. <u>Item. Physical security at ARSR-4 Sites:</u> FAA/AND-300 JRPG provided a briefing of recent changes and memos clarifying FAA policy concerning security requirements at ARSR-4 sites having Crypto requirements. A copy of these memorandums are included in Attachment 14.

10. OPERATIONS.

a. <u>Item. 79-10c, 78-10.b: NEADS - ANG Transition</u>. The NEADS is now an Air National Guard (ANG) unit. Active duty personnel have been reassigned. There should be no noticeable changes as to how they will conduct business.

OPR:

NEADS

CLOSED

b. <u>Item. 78-10.f.</u> 78-10.f. <u>Electronics Installation (EI) Team Access to Joint Use</u>
<u>Sites with Reduced Watch</u>. There have been access problems for EI teams at joint use sites with reduced watch. The teams will continue providing advanced notice to the FAA. Request the FAA site coordinator and the USAF EI team chief agree to team access. The EI team should not attempt to visit the site without proper coordination. If there is any

problem with access and/or access times, request the site coordinator and EI team chief notify the 38 EIG/EIC and the FAA JRPG regional coordinator for resolution.

OPR: FAA Regional Coordinators 38 EIG/EIC

OPEN

c. 79-10.h, 78-10.i: Guantanamo Bay Cuba Radar. FAA Southern Region formally requested the Guantanamo Bay Cuba ARSR-4 become a data tie site. The US Navy agreed to share the data. The FAA Southern Region will begin development of an MOA. Both JRPG cochairmen agreed in principal to this request. Navy has verbally requested the FAA consider maintaining the ARSR-4 and will be formally making this request. See related item in section 5, Joint Use Sites.

OPR: COMNAVAIR/2132 FAA/ASO-472

OPEN

d. <u>Item. Encryption at Additional JSS sites:</u> The Air Force verbally stated a requirement for encryption capability at three additional ARSR-4 sites. The sites were identified as Bootlegger, Ridge MT; Finley, ND; and Remsen, NY. USAF is in the process of validating and approving this requirement. When approved the requirement will be forwarded to the DOD JRPG Cochairman. ACC/SCCJ was tasked to lead a team to determine the resources required to support the additional encryption equipment at these three sites. Four areas of concern were identified, they are; funding, radio availability, need for additional CI-13 equipment, and exploration of other alternatives.

OPR: NORAD/J3WS ACC/DOYG 1AF/DOYR ACC/SCCJ

OPEN

e. <u>Item: Callback Requirement</u>: NAT-914 states "during those periods that a certifying technician is not available at the site, 2-hour call back procedures will be provided...." This generated considerable discussion concerning the intent of the statement and restoration times. Does this mean that a technician is required on site within the 2 hours or does it require the action to restore be initiated within 2 hours? USAF has routinely accepted the restoration criteria established by FAA Air Traffic control. ATR-110 was requested to clarify FAA Air Traffic controls requirements for restoration of equipment at ARSR-4 sites.

OPR:

FAA/ATR-100

FAA/AOP-300

6430.2 CHG 38 Appendix 80

f. Item: ARSR-4 Frequency Loss/Redesign Requirements: Due to the Omnibus Budget Reconciliation Act of 1993, the Government lost 10 MHz (1390-1400 MHz) of the frequency spectrum used by the ARSR-4. This frequency band must be vacated in 1998. Loss of the 10 MHz will impacted the frequency hopping capability of the ARSR-4 required by the Air Force. This frequency hopping capability was purchased and provided as part of the ARSR-4 contract. To maintain the full capability of the radar will require redesigning/reprogramming. The USAF Operations organizations must provide the JRPG Cochairmen and the ARSR-4 Program Office with their unified requirements on this matter. Funding has not been dedicated and will be required for this project.

OPR: NORAD/J3WS

ACC/DOYG 1 AF/DOYR

11. These minutes are directive upon the USAF after authentication and directive upon the FAA after signature of the FAA change order.

DOD JRPG Cochairman

FAA JRPG Cochairman

AUTHENTICATION

MICHAEL D. CALLAGHAN, Colonel, USAF David B. Tuttle, Chief, Programs Division

Chief, Programs Division Directorate of Plans and Programs

for NAS Operations

. •

LIST OF ATTENDEES

ATTACHMENT 1

| RANK | LAST NAME | FIRST NAME | ORGINIZATION | COMMERCIAL PHONE NUMBER | DSN/FTS PHONE NUMBER | FAX NUMBER | E-MAIL |
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| Civ | Tucker | Robert | DAICC | (909) 656-8050 | 947-6766 | (909)656-8070 | |
| Civ | Tudor | Sky | AAL-470 (NISC) | (907) 271-2368 | | (907) 271-2378 | sky.a.tudor@faa.dot.gov |
| Civ | Turechek | Steve | 611 ASUS/LGA | (907) 552-1989 | | 317- 552-9706 | turechecs@611lsspo.topcover.af.mil |
| TSgt | Tyler | Brian | 15 CS/SCXP | (808) 449-8812 | 315-4498812 | | tylerb@wpgate.hickam.af.mil |
| Civ | Vanechanos | George | FAA/AEA-453.1 | (718) 553-3471 | | (718) 995-5750 | |
| Civ | Vu | Tammy | HQ38EIG/EICR | (405) 734-5626 | 884-5626 | 884-5625 | tammy-vu@mailgate.eiw38.af.mil |
| Civ | Wallace | Kari | 30 RANS/DOUN | (805) 734-8232 | 276-3602 | 275-2663 | schobelw@opsgrp1.vafb.af.mil |
| MSgt | Webb | Susan | NEADS/DOY | (315) 334-6177 | 587-6177 | | swebb@neads.ang.af.mil |
| Civ | West | Cecil J. | ASO-471 NISC | (404) 305-6563 | The second company of the contract of the cont | (404) 305-6553 | |
| Civ | Whitbeck | Steve | NISE EAST | (803) 974-4333 | | (803)747-1055 | whitebecs@niseast.nosc.mil |
| MSgt | Williams | Tony | NORAD/J3WS | (719) 554-5481 | | (719)554-5479 | twiliams@spacecom.af.mil |
| Civ | Wormley | Ed | ACC/SC | (757) 764-4439 | 1 | 574-2226 | wormleye@hqaccsc.af.mil |
| Civ | Wuest | Matthew | NRADS San Diego | (619) 524-2140 | 524-2140 | 524-3495 | wuestmk@nosc.mil |
| Civ | Wunderlich | Robert | HTI/AND.440 | (703) 706-9683 | | (703) 684-3380 | bwunderlich@horizons.com |
| Capt | Dellaert | John | 611 ACF/DOYC | | | (907) 552-8730 | dellaert@11afmail.topcover.af.mil |
| Civ | Eastman | Cornelius | AAL-472R | (907) 271-5362 | | (907) 271-4810 | comelius.eastman@faa.dot.gov |
| Civ | Goward | Clarence | AAL-516 | (907) 552-8113 | 315-552-8113 | 552-8279 | clarence.goward@faa.dot.gov |

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DOD/FAA CURRENT ADDRESS LIST **USAF/NAVY/CUSTOMS** AS OF NOV 96

MAIL

MESSAGE

SAF/AQPC

SAF WASH DC//AQPC//

1060 Air Force Pentagon

Washington, DC 20330-1060

HQ USAF/XOOTI

HQ USAF WASH DC//XOOTI//

1480 Air Force Pentagon Washington, DC 20330-1480

HQ USAF/PEPJ

HQ USAF WASH DC//PEPJ//

1070 Air Force Pentagon

Washington, DC 20330-1070

HQ ACC/XPP-JRPG

HQ ACC LANGLEY AFB VA//XPP-JRPG//

204 Dodd Blvd, Ste 202

Langley AFB VA 23665-2778

HQ ACC/CER/CEP/CEV

129 Andrews St, Ste 346

Langley AFB VA 23665-2769

HQ ACC LANGLEY AFB VA//CER/CEP/

CEV//

HQ ACC/DOY

30 Elm Street, Ste 215

Langley AFB VA 23665-2093

HQ ACC LANGLEY AFB VA//DOY//

HQ ACC/DRC

204 Dodd Blvd, Ste 226

Langley AFB VA 23665-2777

HQ ACC LANGLEY AFB VA//DRC//

HQ ACC/SCMB/SCCJ

180 Benedict Ave, Ste 209

Langley AFB VA 23665-1993

HQ ACC LANGLEY AFB VA//SCM/SCC//

NGB/XOPC

2500 Army Pentagon

Washington DC 20310-500

NGB WASH DC//XOPC//

ANGRC/SCMM

3500 Fetchet Ave

Andrews AFB MD 20762-5157

ANGRC ANDREWS AFB MD//SCMM//

SM-ALC/LHE/LHEP

5012 Dudley Blvd (B-269H)

McClellen AFB CA 95652-1038

DIR SPACE AND C-3 MGMT MCCLELLAN

AFB CA//LHE/LHEP//

DOD/FAA CURRENT ADDRESS LIST <u>USAF/NAVY/CUSTOMS (CONTINUED)</u>

MAIL

MESSAGE

HQ AFCA/SYX

203 W. Losey

Scott AFB IL 62225-5219

HQ AFCA SCOTT AFB IL//SYX//

HQ ESC/TNF/TNN

51 Schilling Circle Bldg 1302F

Hanscom AFB MA 01731-2120

HQ ESC HANSCOM AFB MA//TNF/TNN//

HQ PACAF/DOQZ/DOCY

25 E St, Ste I232

Hickam AFB HI 96853-5426

HQ PACAF HICKAM AFB HI//DOQZ/

DOCY//

HQ PACAF/SCMB/SCXP

25 E St, Ste C310

Hickam AFB HI 96853-5409

HQ PACAF HICKAM AFB//SCMB/

SCXP//

10 ADS/CC/DO

1102 Wright Ave

Wheeler AAF HI 96854

10 ADS WHEELER AAF HI//CC/DO//

605 TS/TSH

203 West D Ave, Ste 400

Eglin AFB FL 32542-6867

605 TS EGLIN AFB FL//TSH//

HQ NORAD/J3WS/J5R

250 S Peterson Blvd, Ste 116

Peterson AFB CO 80914-3260

HQ NORAD PETERSON AFB CO//

J3WS/J5R//

US SPACECOM/J6C

150 Vandenberg St, Ste 1105

Peterson AFB CO 80914-4730

USSPACECOM PETERSON AFB CO//

J6C//

1 AF/SCL/SCM/SCX/

590 Suwannee Rd, Ste 7

Tyndall AFB FL 32403-5546

1 AF TYNDALL AFB FL//SCM/SCX/

LGMS//

1 AF/DOY

501 Illinois Ave, Ste 2

Tyndall AFB FL 32403-5548

1 AF TYNDALL AFB FL//DOY//

1AF/LGMS

425 Minnesota Ave Ste 3

Tyndall AFB FL 32403

1AF TYNDALL AFB FL//LGMS//

DOD/FAA CURRENT ADDRESS LIST USAF/NAVY/CUSTOMS (CONTINUED)

MAIL

MESSAGE

-611 AOG/CC//

611 AOG ELMENDORF AFB AK//CC//

5800 G Street, Ste 102

Elmendorf AFB AK 99506-2130

611 ACF/DOY

611ACF ELMENDORF AFB AK//DOY//

5800 G STREET STE 102

Elmendorf AFB AK 99506-2130

611 ASUS/CC/LGR/LGA

6900 9th St, Ste 246/Ste 345

Elmendorf AFB AK 99506-2270

611 ASUS ELMENDORF AFB AK//CC/LGA/

LGR//

30 RANS/DOUN

816 13th St, Ste C

Vandenberg AFB CA 93437-5233

30 RANS VANDENBERG AFB CA//

DOUN//

SE AD Sector/SCX/DOC/DOY/SCL/CE/LG

164 Alabama Ave

Tyndall AFB FL 32403-5000

SE AD SECTOR TYNDALL AFB FL//SCX/DOC/

DOY/SCL/LG/CE//

NE AD Sector/SC/DO/CE/DOC/DOY/

SCX/SCL/SCLQ/LGS

305 Burhanna Rd

Rome NY 13441-4507

NE AD SECTOR ROME NY//SC/DO/ CE/DOC/DOY/SCX/SCL/SCLQ/LGS//

W AD Sector/SCX/DOX/DOC/SCL/JRPG

SCLQ/CE/LGS/DOCO

852 Lincoln Blvd

McChord AFB WA 98438-1317

W AD SECTOR MCCHORD AFB WA//SCX/

DOCO/DOC/SCL/SCLQ/CE/LGS//

38 EIG/EICR

3580d AVENUE (BLDG 201w)

Tinker AFB OK 73145-9155

38 EIS/DRC

4012 Hilltop Rd., Ste 3

Tinker AFB OK 73145-2713

38 EIG TINKER AFB OK//EICR//

84 RADES/CC/TO/TOA/TOY/

7976 Aspen Avenue

Hill AFB UT 84056-5846

38 EIS TINKER AFB OK//DRC//

84 RADES HILL AFB UT//CC/TOA/TOY//

6430.2 CHG 38 Appendix 80

DOD/FAA CURRENT ADDRESS LIST USAF/NAVY/CUSTOMS (CONTINUED)

MAIL

MESSAGE

154 OG/DO/MAI

360 Harbor Drive

Hickam AFB HI 96853-5517

· 1540G HICKAM AFB HI//DO/MAI//

Naval Air Systems Command

PMA 2132

Villa Roaad - Bldg 271

St. Inigoes, MD 20684-0010

COMNAVAIRSYSCOM WASH DC//

PMA 2132//

NCCOSC RDTE Div

Code D335Mw 53560 Hull ST

San Diego, CA 92152-5001

NCCOSC RDTE DIV SAN DIEGO CA//335/654//

NISE EAST

Code 313/315 4600 Marriott Drive North Charleston, SC 29406-6504 NISEEAST CHARLESTON SC//313/315//

North Charleston, SC 29406-6304

Fleet Area Control and Surveillance Facility Code 03TD-P.O. Box 357062 San Diego CA 92135-7062 FACSFAC SAN DIEGO CA//03TD//

U.S. Customs Service C3I Program Office National Aviation Center 5020 S. Meridian Ave.

Oklahoma City, OK 73119-5000

USCS CNAC OKLAHOMA CITY OK//

C3I PROGRAM OFFICE//

HQ AFFSA/XP

1535 Command Drive, Ste D-309 Andrews AFB MD 20331-7002 HQ AFFSA ANDREWS AFB MD//XR//

325 TRS/DO

213 Dixie Rd

Tyndall AFB FL 32403-5016

325 TRS TYNDALL AFB FL// DO//

169 ACWS/DO/MAI

1102 Wright Ave

Wheeler AAF, HI 96854-5200

169ACWS WHEELER AAF HI//DO/MAI//

DOD/FAA CURRENT ADDRESS LIST USAF/NAVY/CUSTOMS (CONTINUED)

MAIL

MESSAGE

USCUSTOMS SERVICE DAICC P.O. BOX 6363 MARCH AFB CA 92518 USCS DAICC MARCH AFB CA//OPS//

57 OSS/OSAM 4450 Tyndall Ave Nellis AFB nv 89191-6067 57 OSS NELLIS AFB NV//OSAM//

DOD/FAA CURRENT ADDRESS LIST FAA

MAIL

MESSAGE

FAA/AOP-300-JRPG/ ACO-320/ATR-110 ASE-300/ASI-200/AFZ-100/ AND-440/ASE-20 800 Independence Ave., SW Washington, DC 20591-5000 FAA WASH DC//AOP-300-JRPG/ACO-320/ ATR-110/ASE-300/ASI-200/AFZ-100/ AND-440/ASE-20//

FAA Technical Center/AOS-520 Atlantic City Airport

Atlantic City, NJ 08405-5000

FAA TECH CENTER ATLANTIC CITY NJ//AOS-520//

FAA Aeronautical Center/ AML-610 P.O. Box 25082 Oklahoma City, OK 73125-4952 FAA AERONAUTICAL CENTER OKLAHOMA CITY OK//AML-610//

FAA Aeronautical Center/AOS-200 6500 S. MacArthur, Bldg 189 Oklahoma City, OK 73125FAA AERONAUTICAL CENTER OKLAHOMA CITY OK//AOS-200//

FAA/AEA-462/AEA-510 FAA Eastern Region Fitzgerald Building JFK International Airport Jamaica, NY 11430-5000 FAA EASTERN RGN NEW YORK NY //AEA-462/AEA-510//

FAA/AGL-459.3/459.13/ AGL-512/AGL-458.1 FAA Great Lakes Region 2300 E. Devon Avenue Des Plaines, IL 60018-5000 FAA GREAT LAKES RGN DES PLAINES IL// AGL-459.3/459.13/AGL-512/AGL-458.1//

FAA/ZMP-510 FAA/Minneapolis ARTCC 512 Division Street Minneapolis, MN 55024-5000 FAA MINNEAPOLIS ARTCC MINNEAPOLIS MN//ZMP-510//

FAA/ANE-471/ANE-511 FAA New England Region 12 New England Exec Park Burlington, MA 01803 FAA NEW ENGLAND RGN BURLINGTON MA// ANE-47162/ANE-511//

DOD/FAA CURRENT ADDRESS LIST FAA

MAIL

MESSAGE

FAA/AOP-300-JRPG/ ACO-320/ATR-110 ASE-300/ASI-200/AFZ-100/ AND-440/ASE-20 800 Independence Ave., SW Washington, DC 20591-5000 FAA WASH DC//AOP-300-JRPG/ACO-320/ ATR-110/ASE-300/ASI-200/AFZ-100/ AND-440/ASE-20//

FAA Technical Center/AOS-520 Atlantic City Airport

Atlantic City, NJ 08405-5000

FAA TECH CENTER ATLANTIC CITY NJ//AOS-520//

FAA Aeronautical Center/ AML-610 P.O. Box 25082 Oklahoma City, OK 73125-4952 FAA AERONAUTICAL CENTER OKLAHOMA CITY OK//AML-610//

FAA Aeronautical Center/AOS-200 6500 S. MacArthur, Bldg 189 Oklahoma City, OK 73125FAA AERONAUTICAL CENTER OKLAHOMA CITY OK//AOS-200//

FAA/AEA-462/AEA-510 FAA Eastern Region Fitzgerald Building JFK International Airport Jamaica, NY 11430-5000 FAA EASTERN RGN NEW YORK NY //AEA-462/AEA-510//

FAA/AGL-459.3/459.13/ AGL-512/AGL-458.1 FAA Great Lakes Region 2300 E. Devon Avenue Des Plaines, IL 60018-5000 FAA GREAT LAKES RGN DES PLAINES IL// AGL-459.3/459.13/AGL-512/AGL-458.1//

FAA/ZMP-510 FAA/Minneapolis ARTCC 512 Division Street Minneapolis, MN 55024-5000 FAA MINNEAPOLIS ARTCC MINNEAPOLIS MN//ZMP-510//

FAA/ANE-471/ANE-511 FAA New England Region 12 New England Exec Park Burlington, MA 01803 FAA NEW ENGLAND RGN BURLINGTON MA// ANE-47162/ANE-511//

DOD/FAA CURRENT ADDRESS LIST FAA /CUSTOMS (CONTINUED)

MAIL

MESSAGE

FAA/AAL-470/AAL-500 FAA Alaska Region 222 W. 7th Ave. Box 14 Anchorage, AK 99513-7587

FAA ALASKA RGN ANCHORAGE AK//AAL-470-AAL-500//

USCUSTOMS SERVICE DAICC P.O. Box 6363 March AFB CA 92518

USCS DAICC MARCH AFB CA//OPS//

FAA REGIONAL JRPG COORDINATORS

ATTACHMENT 3

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DOD JRPG COORDINATORS

ATTACHMENT 4

DOD JRPG COORDINATORS

| Name | Organization | Telephone |
|--------------------------|----------------------------|--------------------------------------|
| Tom Schubert | NAVAIRSYSCOM (USN) | (703) 902-5223 |
| Richard (Dick) Constable | NEADS/SCQJ | (315) 334-6143 DSN 587-6143 |
| Steve Whitbeck | NISE East Charleston (USN) | (803) 974-4333 DSN 563-2030 |
| William Clemens | SEADS/SCLQ | (904) 283-5481 DSN 523-5481 |
| Lee Eby | WADS/SCLQ | (206) 984-4758 DSN 984-4758 |
| Maj Debbie Levin | 611ACF/DOY (ANR) | (907) 552-1294 DSN 317 552-1294 |
| Matthew Wuest | NISE West San Diego (USN) | (619) 524-2140 DSN 524-2140 |
| Maj Noreen Olsen | PACAF/DOCO | (808) 449-4264 DSN (315) 449-4264 |

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JOINT RADAR PLANNING GROUP

(DOD/FAA)



OVERVIEW



- OBJECTIVE
- ORGANIZATION
 - -AUTHORITY AND EXECUTIVE AGENT
 - -JRPG CHAIRPERSONS
 - -PARTICIPANTS
- JOINT SURVEILLANCE SYSTEM
 - -MAPS
- ISSUES



JOINT RADAR PLANNING GROUP



- PLANNING FOR JOINT USE OF LONG RANGE RADAR FACILITIES
 - FAA PROVIDES
 CIVIL AIR TRAFFIC CONTROL
 - DOD PROVIDES
 PEACETIME SURVEILLANCE AND AIR SOVEREIGNTY
 WARTIME LIMITED AIR DEFENSE



AUTHORITY & EXECUTIVE AGENTS



EXECUTIVE ORDER "CIVIL AIR POLICY" 26 MAY 54

| DOD DOT | |
|----------------------|-------|
| USAF | |
| ACC FAA | |
| ATS | |
| XP AAF | |
| XPP AOP-1 | |
| AOP-3 | 00 |
| XPP-JRPG AOF JRPG | >-300 |



JOINT RADAR PLANNING GROUP



TWO CHAIRPERSONS
 DOD COCHAIRMAN - KEN KINGSMORE
 ACC / XPP-JRPG
 FAA COCHAIRMAN - GIL MAUCK
 FAA / AOP-JRPG

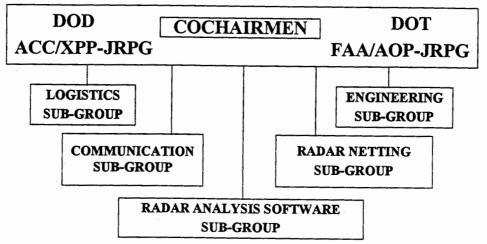


- DOD HQ USAF, NGB, ACC, NORAD, ANG, ESC, PACAF, NAVY, SPACECOM, AFC4A, ANR, SM-ALC, 1 AF, NISE EAST & WEST, US CUSTOMS, HIANG, 3 AIR DEFENSE SECTORS & USN FACSFAC
- FAA HQ FAA, FAA REGIONS (NEW ENGLAND, EASTERN, SOUTHERN, SOUTHWEST, WESTERN-PACIFIC, NW MOUNTAIN, GREAT LAKES & ALASKAN), FAA DEPOT, FAA TECH CENTER, FAA AERONAUTICAL CENTER



JRPG ORGANIZATION AND STRUCTURE







JOINT SURVEILLANCE SYSTEM



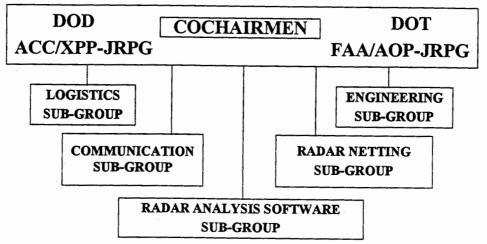
• CONSISTS OF -- CONTUS PACAF ALASKA TOT

| - OPS CONTROL CTR | 3 | 1 | 1 | 5 |
|----------------------|----|---|----|-----|
| - SYSTEM SPT ELEMENT | 1 | | | 1 |
| - RADAR SITES | 43 | 3 | 10 | e E |



JRPG ORGANIZATION AND STRUCTURE







JOINT SURVEILLANCE SYSTEM



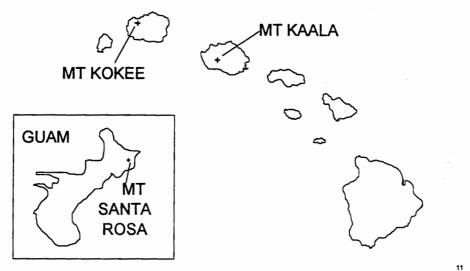
• CONSISTS OF -- CONTUS PACAF ALASKA TOT

| - OPS CONTROL CTR | 3 | 1 | 1 | 5 |
|----------------------|----|---|----|-----|
| - SYSTEM SPT ELEMENT | 1 | | | 1 |
| - RADAR SITES | 43 | 3 | 10 | e E |



PACAF JOINT USE RADAR SITES







PACAF JOINT USE RADAR SITES



• 3 JOINT USE SITES

- DATA SHARED BY USAF / FAA / USN
- -1 ANG FACILITY / ANG & FAA MAINTAIN (MT KAALA)
- -1 ANG FACILITY / ANG MAINTAINS (MT KOKEE)
- -1 PACAF FACILITY / FAA & PACAF MAINTAIN (MT SANTA ROSA)



- 19JOINT USE SITES
 - -15 USAF LRRs (AN/FPS-117)
 - -1 ARSR-3 (FAA OWNED)
 - -3 ATCBI-5 (FAA OWNED)
- USAF SITES MAINTAINED BY CONTRACTOR

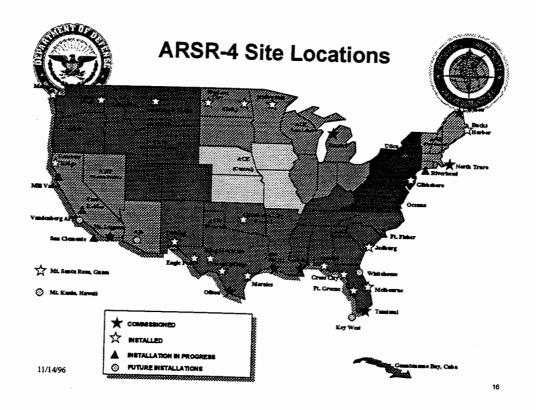


ARSR-4 SITE STATUS



- 44 ARSR-4 SITES
 - -40 JSS SITES
 - 2 NAVY SITES
 - 1 TRAINING SITE
 - 1 USAF ONLY SITE
- 9 SITE COMMISSIONED
- 30 SITES INSTALLED
- 10 SITES WITH INSTALLATION IS IN PROGRESS

15



AIR SOVEREIGNTY BRIEFING

ATTACHMENT 6

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HQ NORAD

AIR SOVERIEGNTY OVERVIEW

HQ NORAD/J3WS
AEROSPACE WARNING DIVISION

MSgt Tony Williams



HQ NORAD

CINCHORAD WILL OPERATE FORCES AS
FAR FROM THE NORTH AMERICAN
CONTINENT AS REQUIRED TO ENSURE
THE AIR SOVEREIGNTY AND AIR DEFENSE
OF CANADA AND THE UNITED STATES.



HQ NORAD

- BINATIONAL CANADIAN AND US COMMAND
- ESTABLISHED IN 1958
- HQ PETERSON AFB, COLORADO SPRINGS, COLORADO
- COMBINED CANADIAN AND JOINT US STAFF
- CHEYENNE MOUNTAIN COMPLEX SERVES AS COMBINED NORAD AND USSPACECOM OPS CENTER

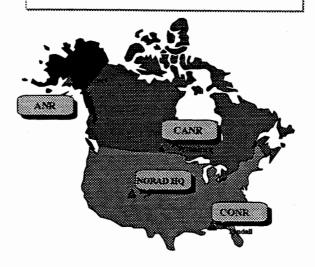


BACKGROUND

- CURRENTLY COMMANDED BY A US FLAG OFFICER WITH A CANADIAN FLAG OFFICER DEPUTY
- RESPONSIBLE TO THE CANADIAN CHIEF OF DEFENCE STAFF AND THE US SECRETARY OF DEFENSE
- **→ THREE NORAD REGIONS**
 - ALASKAN
 - •• CANADIAN
 - CONTINENTAL UNITED STATES



NORAD REGIONS





PROVIDE WARNING

- DETECT AND IDENTIFY ALL-AEROSPACE OBJECTS APPROACHING NORTH AMERICA
- PROVIDE THREAT ASSESSMENT TO RESPONSIBLE AUTHORITIES OF CANADA AND THE UNITED STATES

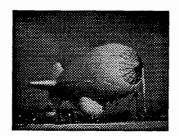
 CHEYENNE MIN

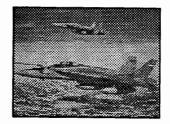




AIR SOVEREIGNTY

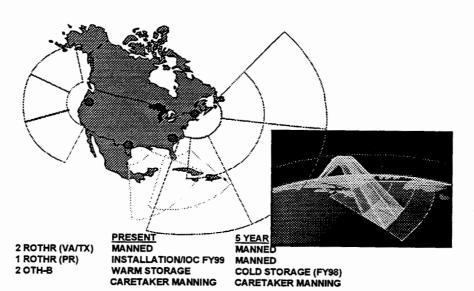
- NATION'S RIGHT TO EXERCISE CONTROL OVER ITS AIRSPACE
- DETECT, IDENTIFY, INTERCEPT
- ENDURING MISSION







OTH-B AND ROTHR





JOINT SURVEILANCE SYSYEM (JSS)

JSS IS BACKBONE OF AIR DEFENSE SYSTEM

- PROVIDES COMPREHENSIVE RADAR AND COMM NET
- UNIQUE MISSION DICTATES REQUIREMENTS



HQ NORAD

TODAY'S THREAT TO U.S.

- ■SMALL, LOW-LEVEL, EVASIVE AIRCRAFT
 - ALCM/SLCM
 - **DRUG SMUGGLERS**
- NON-SQUAWK, PRIMARY RADAR TARGETS



HQ NORAD

- NORAD HAS EVOLVED TO MEET TODAY'S CHALLENGES THROUGH JOINT AND COMBINED COOPERATION AND FLEXIBLE PLANNING
- TO STAY RELEVANT NORAD MUST MEET THE FUTURE AEROSPACE THREATS TO NORTH AMERICA
- BOTH FAA AND DOD MISSIONS MUST BE ACCOMPLISHED



HQ NORAD

■ CONCLUSION

- JSS CREATED FOR EFFECTIVE USE OF NATIONAL ASSETS
- **JRPG HAS BEEN SUCCESSFUL**
- JSS MUST REMAIN VITAL LINK IN AIR DEFENSE SHIELD



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Major Robert W. Kaelin 1 AF/SCM November 1996







- * PURPOSE
- **★ STANDARDS AND METRICS**
- **★ JOINT TECHNICAL INSPECTION (JTI) PROGRAM**
- **★ JTI RESULTS**
- \star JTI TASK FORCE ISSUES
- **★ USAF CONCERNS**
- **★ SUMMARY**







- ★ Provide the Joint Radar Planning Group quality feedback on FAA maintenance performed at JSS Long Range Radar Sites from a First Air Force Mission Systems (SCM) perspective
 - ◆ Examine search radar availability rates for the entire JSS using Atmospheric Early Warning System (AEWS) standards and metrics
 - Review results of JTIs performed over the past year with special emphasis placed on FAA maintenance of USAF owned equipment







- **★ Operational Availability (A sub O):**
 - ◆ Shows the percent of time the EQUIPMENT END ITEM is ready to support operational requirements.
- **★ Equipment Reliability (E sub R):**
 - ◆ Shows the actual reliability of the EQUIPMENT END ITEM; an indicator of how well the equipment is holding up.
- **★ Possessed Hours:**
 - ◆ Total number of hours during a given month an item of equipment was possessed by an organization Equal to 24 hours a day multiplied by the number of days in a month that the equipment was possessed by an organization.







★ Formulas:

- ◆ A sub O = Total possessed hours minus all RED downtime (scheduled and unscheduled), divided by possessed hours.
- ◆ E sub R =Possessed hours minus <u>unscheduled</u> RED hours, divided by possessed hours.
- **★ JSS LRR Standards**
 - A sub O = 90%
 - \bullet E sub R = 95%
 - Ref: AEWS Integrated System Master Plan and 1AFI 21-1, Equipment Maintenance Status and Inventory Reporting







| FY 96 Average | A sub O | E sub R | |
|-----------------------|---------|---------------|--|
| ★ SE AD SECTOR | 99.41% | 99.72% | |
| ★ W AD SECTOR | 98.31% | 99.67% | |
| ★ NE AD SECTOR | 99.30% | <i>99.90%</i> | |

- ◆ NOTE: Data extracted from USAF AD Sector Monthly Maintenance Summaries
- ★ From a First Air Force Mission System perspective, JSS LRR Operational Availability and Equipment Reliability Rates are well above AEWS Standards.







- ★ Quality Assurance inspections of JSS Radar sites
- * Performed by FAA Region and USAF Air Defense Sector Quality Assurance Inspectors
- * Inspections governed by FAA order 6040.6E
- * Reports are "snapshots"
- * FAA prepares the report with USAF input







NORTHEAST AIR DEFENSE SECTOR

SITE

*RIVERHEAD, NY (J-52)

NASHWAULK, MN (J-60)

FAA REGION

EASTERN

GREAT LAKES

SOUTHEAST AIR DEFENSE SECTOR

SITE

FAA REGION

JEDBURG, SC (J-03)

SOUTHERN

WHITEHOUSE, FL, (J-04)

SOUTHERN

TYNDALL, FL (J-11)

SOUTHERN







WESTERN AIR DEFENSE SECTOR

SITE

*OILTON, TX (J-16)

SONORA, TX (J-25)

*SILVER CITY, NM (J-28)

*MT. LAGUNA, CA (J-30)

*KALISPELL, MT (J-78)

FAA REGION

SOUTHWEST

SOUTHWEST

SOUTHWEST

WESTERN PACIFIC

NORTHWEST MOUNTAIN









RIVERHEAD, NY (J-52)

EASTERN

- USAF radios are well maintained with only one out of tolerance condition noted.
- ◆ T.O.s were in good shape.

NASHWAULK, MN (J-60)

GREAT LAKES

- ◆ Only USAF radios were inspected during JTI
- ◆10 of the 72 USAF radio key parameters were out of tolerance (14%)
- •T.O.s were overall satisfactory; several changes missing

^{*} JTI final report not received; sector provided pertinent data







SITE

FAA REGION

JEDBURG, SC (J-03)

SOUTHERN

- ◆ ARSR and CD not inspected pending ARSR-4 installation.
- ◆ All inspected facilities were very well maintained; no out of tolerance conditions discovered during the inspection of USAF equipment.
- USAF inspectors commended the excellent training program and solid maintenance practices at the site.







SITE

FAA REGION

WHITEHOUSE, FL (J-04)

SOUTHERN

- ◆ All facilities were very well maintained
- ◆ No out of tolerance conditions were discovered on the USAF equipment.
- ◆ T.O.s were in good condition.
- ◆Common Digitizer not inspected; not released by ARTCC
- ◆ USAF inspectors commended the excellent technical training program at the site.







SITE

FAA REGION

TYNDALL AFB, FL (J-11)

SOUTHERN

- *All facilities were very well maintained.
- ◆No out of tolerance conditions were discovered on USAF equipment. NOTE: GAG radios are maintained by the 325 Comm Squadron TAFB
- ◆USAF inspectors commended the excellent training program and solid maintenance practices at the site







SITE

FAA REGION

OILTON, TX (J-16)

SOUTHWEST

- ◆ USAF radio JTI conducted in conjunction with ARSR-4 Joint Acceptance Inspection (JAI)
- ◆ 31 of the 96 USAF radio key parameters were out of tolerance (32%); 16 CDI
- ◆ Problems were identified with the AN/GRC-171 multichannel radio that required replacement of transmitter and receiver subassemblies to correct
- USAF inspector noted the radio equipment was dirty
- ◆ Several T.O.s were missing or were missing latest changes







SITE

FAA REGION

SONORA, TX (J-25)

SOUTHWEST

- ◆ Data tie site; no USAF equipment inspected
- ◆ Inspected FAA facilities were in excellent condition







SITE

FAA REGION

SILVER CITY, NM (J-28)

SOUTHWEST

- ◆ 24 of the 84 USAF radio key parameters were out of tolerance (28%); 10 CDI
- Radio equipment was very dirty
- ullet Supplements and changes were missing from several T.O.s
- ◆ Six T.O.s were missing







SITE

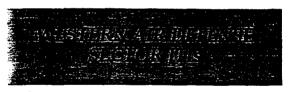
FAA REGION

MT. LAGUNA, CA (J-30)

WESTERN PACIFIC

- ◆ USAF radio JTI conducted in conjunction with ARSR-4 JAI
- ◆ 28 of the 122 USAF radio key parameters were out of tolerance (23%); 27 CDI
- ◆ Radio equipment was very dirty; intake filters were caked with dust, lint, and debris
- ♦ Most radios were missing hardware
- Several pieces of radio test equipment were uncalibrated
- ◆ Current supplements and changes were missing from many T.O.s







SITE

FAA REGION

KALISPELL, MT (J-78)

NORTHWEST MOUNTAIN

- ◆ Inspected FAA facilities were in excellent condition
- ◆ 28 of the 72 USAF radio key parameters were out of tolerance (39%); 18 CDI
- ◆ Radio equipment was very clean
- ◆ 5 required T.O.s missing







* PURPOSE AND SCOPE

- ◆ Review proposed changes in the FAA technical inspection program as it transitions to the National Airspace System (NAS) Technical Evaluation Program (NASTEP)
- ◆ Identify procedures or areas of agreement for conducting JTIs within the NASTEP







- ★ Last meeting held in San Antonio, TX (Sep 96)
 - ◆ Developed JTI coordination flowchart
 - •Finalized Key Performance Parameter Count and USAF Radio Checklists
 - ◆ Recommended administrative changes to FAA Order 6040.6E Appendix 2 (i.e. semi-annual follow-up report on open action items)
 - ◆ Discussed FARR Program implementation as it impacts JTI scheduling
 - ◆ Agreed NASTEP software meets user requirements
- ★ Task Force met objectives







- **★ Timeliness of reports**
 - ◆ FAA not meeting 60 day suspense in some regions
- ★ Lack of follow-up
 - ♦ No positive feedback to USAF
 - ♦ Negates inspection process
- - ♦ High number of deficiencies found at our western sites

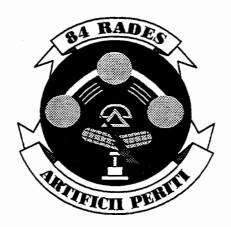






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- **★ STANDARDS AND METRICS**
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- \star JTI TASK FORCE ISSUES
- **★ USAF CONCERNS**

EXPERTS IN WORKMANSHIP









RADES JSS INVOLVEMENT (Primarily <u>FARR</u>)

United States Air Force
84th Radar Evaluation Squadron
Mr John E. Jett
RADES ARSR-4 Program Manager

Nov 96







- Current Scope of RADES Involvement
- Work Accomplished to Date







(continued)

- Upcoming RADES Phase IV's
- Upcoming ARSR-4 Baseline Evaluations
- ARSR-4 Demonstrated Performance
- Pre-baseline Support Requirements
- Miscellaneous JSS Work
- Conclusions (Relative to FARR Involvement)





CURRENT SCOPE of RADES INVOLVEMENT

- Jointly Participate In Phase IV Effort
 - Purpose: Contractor demonstrates that system meets specifications, gov't accepts system
 - One maintenance technician or one technical advisor
 - 7 to 10 days in field

• Jointly Participate in Baseline Evaluations

- Purpose: Equipment check, system optimization, performance assessment. Report used for FAA commissioning, Air Force acceptance, and trend analysis archive
- 4-person team
- 3 to 4 weeks in field







WORK ACCOMPLISHED to DATE

- Sites With Completed Phase IV Testing
 - Mt Laguna CA
 - Empire MI
 - Rocksprings TX
 - Makah WA
 - Lake Charles LA
 - Tamiami FL
 - King Mountain TX
 - Nashwauk MN
 - Oceana VA
 - Demming NM
 - Cross City FL

- Slidell LA
- Morales TX*
- Cross City FL
- Jedburg SC
- Finley ND
- Watford City ND
- Oilton TX
- Onton 170
- Melbourne FL
- Bucks Harbor ME
- Salem OR*
- Tyndail FL

- North Truro MA
- Eagle Pass TX*
- Mt Santa Rose Guam
- Rainbow Ridge CA
- Caribou ME
- Fort Green FL*
- Bootlegger Ridge MT
- Mica Peak WA
- Gibbsboro NJ
- * 84 RADES participation

complete, Phase IV not complete







WORK ACCOMPLISHED to DATE

(CONTINUED)

• Sites With Completed

Baseline Evaluations:

Tamiami FL
 Empire MI
 Mt Laguna CA
 Lake Charles LA
 Makah WA
 Oilton TX
 North Truro MA
 Bootlegger Ridge MT
 Rocksprings TX
 Mt Laguna CA
 Lake Charles LA
 Oilton TX
 Cross City FL
 Oceana VA
 Jedburg SC







WORK ACCOMPLISHED to DATE

(CONTINUED)

· Sites With Completed

Baseline Evaluations:

Nashwauk MN

Melbourne FL

- Slidell LA

Watford City ND

- Caribou ME

Bucks Harbor ME

- King Mt TX







WORK ACCOMPLISHED TO DATE • Commissioned Sites:

- Tamiami FL 12 Apr 95 - North Truro MA 20 Jun 96 - Empire MI 27 Jun 96 - Lake Charles LA 2 Jul 96 - Mt Laguna CA 3 Jul 96







WORK ACCOMPLISHED TO DATE

(CONTINUED) • Commissioned Sites:

- Oilton TX 26 Aug 96 - Caribou ME 30 Oct 96 - Slidell LA 1 Nov 96 - Oceana VA 4 Nov 96







UPCOMING PHASE IV's

• Lakeside MT 5 Nov 96 Paso Robles CA 10 Dec 96 Key West FL 2 MAR 97 • Ft Fisher NC 12 Oct 96 Mill Valley CA Vandenburg CA 25 Jan 97 2 Dec 96 • Mt Kaala HI 14 Mar 97 Guantanamo CU 2 Jan 97 Remsen/Utica NY 9 Mar 97 → Ajo AZ TBD Riverhead NY San Clemente CA 1 Mar 97 2 May 97

For coordination and planning purposes, the composite Phase IV effort is broken into two components: 1) pre-Phase IV equipment checkout, and 2) formal Phase IV contractor testing. Due to scheduling constraints, RADES participation is limited to pre-Phase IV equipment checkouts.







UPCOMING BASELINE EVALUATIONS

| • King Mountain TX | In-progress |
|--------------------|-------------|
| • Tyndall FL | In-Progress |
| • Mica Peak WA | 19 Nov 96 |
| •• Morales TX | 13 Jan 97 |
| •• Ft Green FL | 21 Jan 97 |
| •• Gibbsboro NJ | 17 Feb 97 |







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| •• Gibbsboro NJ | 17 Feb 97 |







PRE-BASELINE SUPPORT REQUIREMENTS

- Minimum Of 45 Day Notification
- Data Line Connectivity To SOCC & ARTCC
- ISM RMS PAMRI
- Dual-Channel ATCBI-5 Installed
- Region/AOS-230 Supportability
- Down-Time Requirements Coordinated With SAOC & ARTCC
- Flight support USAF/FAA







SAN PEDRO CA (J-31)

29 Jul - 9 Aug 96

- *Special Evaluation of CD-2C Remote Automated Control Interface (RACI) Mod
- •Long Range Radar (range) Extension

KENO OR (J-82)

27 - 30 May 96

- •Acceptance testing (for subsequent commissioning) of the Mode-S Beacon system operating in the Independent Beacon Interrogator (IBI) mode
- •Performance compared favorably with pre-existing ATCBI-5 System







MISCELLANEOUS JSS WORK (continued)

MILL VALLEY

7 Dec 95

- 84 RADES reported concurrence with CD-2C commissioning, acknowledging a "glitch" within the MIG which required occasional reset by site technician (long periods between glitches)
- •Forwarded CD-2C CRR checklist to HQ 1AF/DOY







- Evaluations and baseline coordination's have been, and will remain a joint venture between the USAF and FAA
- Please ensure that pre-baseline support requirements are complete before RADES team arrives
- Systems evaluated to date meet overall expectations

JOINT TECHNICAL INSPECTION (JTI) ROGRAM ORDER 6040.6E

ATTACHMENT 9

· •

· •

JOINT TECHNICAL INSPECTION TASK FORCE

- 1995 OBJECTIVES
 - IDENTIFY AREAS OF AGREEMENT ON JTI PROCESS
 - IDENTIFY AREAS FOR IMPROVEMENT AND FUTURE REVIEW
- 1996 OBJECTIVES
 - REVIEW ORDER 6040.63 JTI IMPLEMENTATION
 - ESTABLISH KEY PERFORMANCE PARAMETER COUNT

JTI TASK FORCE 1995 AGREEMENTS

- RETAIN 3-YEAR CYCLE FOR JTI
- ALL KEY PERFORMANCE PARAMETERS CHECKED DURING JTI
- RETAIN TABLE IN REPORTS AND INCLUDE KEY PERFORMANCE PARAMETERS, DETAILS
- CDIs DOCUMENTED IN REPORTS
- WORKSHEETS RETAINED IN HARD COPY FILE
- CHANGE 30 TO 60 DAY FINAL REPORT

JTI TASK FORCE 1996 AGREEMENTS:

- NASTEP SOFTWARE WILL BE USED
 ELIMINATE OLD FORMS
- INCLUDE RADIO CHECKLIST AT JSS
- DEFINE KEY PERFOR PARA. COUNT
- JTI MAY BE SCHEDULED OFF-CYCLE
 WORKLOAD CONSIDERATION
- CHANGE 30 TO 60 DAY FINAL REPT.

POST INSPECTION ACTIVITIES

- FAA INSPECTOR VERIFY ISSUES
- FINAL DRAFT REPORT AND COPY TO USAF INSPECTION TEAM LEAD
- USAF INSPECTION TEAM LEADER REVIEW WITHIN 15 DAYS TO SIGN/RETURN
- FAA INSPECTOR FINALIZE REPORT

POST-INSPECTION CONT'D

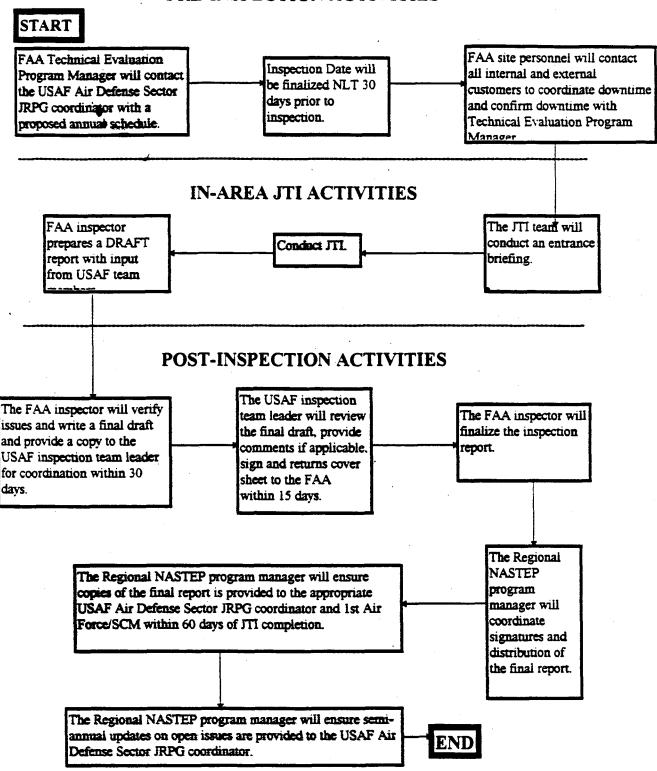
- FAA NASTEP REGIONAL PROGRAM MANAGER (RPM) TO COORDINATE SIGNATURES AND DISTRIBUTION
- DISTRIBUTION WITHIN 60 DAYS TO:
 - JRPG COORDINATORS
 - FAA JRPG
 - USAF AIR DEFENSE JRPG
 - 1ST AIR FORCE/SCM
 - FAA HQ, NASTEP
- FAA RPM UPDATES STATUS

SUMMARY

- 1995 ORDER 6040.6E REVIEWED
- APPENDIX 2 AMENDED TO REFLECT RECOMMENDATIONS
- 1997 JTI TASK FORCE WILL REVIEW IMPLEMENTATION AND REPORTING

JOINT TECHNICAL INSPECTION PROCESS^{nt 80} FLOW CHART

PRE-INSPECTION ACTIVITIES



Key Parameter Count JTI Equipment

| Equipment | Number of Keys | | Remarks |
|---------------------|------------------------|----|--------------------------------------|
| ARSR-1/2 w/SSR/DMTI | Total for Two Channels | = | 18 |
| ARSR-3 | Total for Two Channels | = | 42 |
| ARSR-4 | | | 7 |
| ATCBI-5 | Total for Two Channels | = | 38 |
| ATCBI-5 w/ISLS | Total for Two Channels | = | 40 |
| AN/FYQ-49 | • | | 18 |
| CD-2C | Total for Two Channels | = | 9 3 keys are common to both channels |
| AN/GRC-171 | | 21 | 7 per unit |
| AN/GRT-21/22 | | 5 | Per unit |
| AN/GRT-23/24 | | 4 | Per unit |
| AN/GRC-171B(V)4 | | 6 | Per unit |
| CODAN | | 1 | Per channel |

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CI-13 JSS Program Status 19-21 Nov 96

Outline of Presentation

- Cl-13 Program Contacts
- CI-13 Overview
- Contract Status
- Design Status
- Training Status
- Remote RCU Ops/Maintenance
- Summary

CI-13 Program Office Contacts

- FARR Program Manager
 - Mr. Don Kinney
 - ESC/TNF, FAA Washington D.C.
 - Comm (202) 267- 8485/5329, FAX x5480
- Project Manager
 - Lt. Dan Radulski
 - ESC/TNN, Comm (617) 377-7226
 - DSN 478-7226, FAX x9567 radulskid@hanscom.af.mil

19-21 Nov

CI-13 Program Office Contacts

- Integration Manager
 - Lt. Jim Heigle
 - ESC/TNN, Comm (617) 377-9518
 - DSN 478- 9518, FAX x9567 heiglej@hanscom.af.mil
- Integration Engineer
 - Mr. John P. Treacy
 - ESC/TNF (Mei Technology) Comm (617) 377- 4626
 - DSN 478 4626, FAX x9567 treacyjo@hanscom.af.mil
- Logistics Manager
 - Mr. Howard A. Beaulieu, Mr. Charlie Hayes
 - ESC/TNN, Comm (617) 377-7292
 - DSN 478-7292, FAX x9567 beaulieuh@hanscom.af.mil

Other Key Organizations/Participants

- Engineering Installation
 - Requirements
 - 38 EIG/DRC, J. Geldbaugh, DSN 884-9322
 - Installation
 - 38 EIW/EIC, Tammy Vu, DSN 884-9314
- Depot Support/Maintenance/System Staging.
 - Program Management
 - · SA- ALC/LTMCD, Jim Mills, DSN 969 2751
 - Equipment Specialist
 - · SA ALC/LTMCD, John Crouch, DSN 969 2751
- System Engineering
 - Mitre Corporation, Mr. Joe Levy, Mr. Bob Hansen
 - Telephone (617) 271- 2631, 5451

19-21 Nov

Other Key Organizations/Participants

- CONUS Comm Program Management
 - 1AF/SCX, Capt. Tim Blount, DSN 523 3768
- CONUS Operational Concept
 - 1AF/DOY, SMSgt Bob Silverio, DSN 523 3786
- Training
 - Program Management and Planning
 - 342 TTS/TTOP, Mr. Juan Zavaia, DSN 473-2930
 - Courseware Preparation
 - 342 TTS/TTSCD, Ms. Elvira Almarez, DSN 473-2814
- Maintenance Concept
 - Development and Preparation
 - ACC/SCCJ, SMSgt Mark Hanson, DSN 574 4477

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Remote Control Unit(RCU) Function

- Secure transfer of the Key from the MCU to a Variety of ECUs
- Traditional Key Management
- Simple Set-up and Maintenance
 - located at ARSR-4 Radars Sites, GATR Sites, and the SAOCs
 - initialized, Rekeyed and Field Maintained by FAA personnel

19-21 Nov

CI-13 Contract Status

- Summary of NSA/Motorola Brief 17 Sep 96
 - Finished System Assessment
 - extensive AF participation
 - · potential field problems
 - · user friendly system
 - · entering H/W qualification
 - Final Design Review completed
 - System Assessment Revisitation
 - Risk Assessment
 - · Technical risk medium
 - · Schedule risk medium

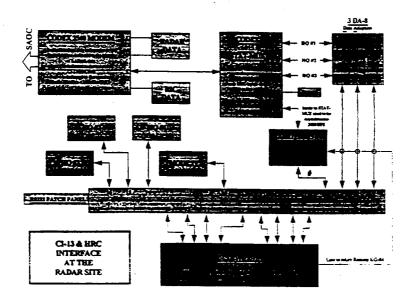
CI-13 Design Updates

- Western Telemetric Inc. Code Activated Switch (CAS)
 - Replaces the Tellabs Xplexer (Sys Assessment Result)
 - · Co-located and interconnected to the MCU
 - · Connects up to 64 Ports with high speed switching
 - ASCII Code Activation
- Remote Radar Maintenance Terminal
 - Commercial Laptop
 - CD ROM Drive
- KEK Rollover- Redesign approved by NSA Doctrine
 - ECP to correct in process

19-21 Nov

JSS Planning Status

- JSS Installation Schedule is in planning stages
 - Plan based on installing CI-13 at 3 SAOCs, 8 GATR and Radio only Sites, and 30 FAA Radar Sites
 - 38 Sites are divided into Three Sectors
 - Plan to Stage Installs at SA-ALC, San Antonio Texas
 - Initial install will include a representative set of radar sites
 - Purpose is to validate integration design before full integration into SAOCs and JSS sites
 - 38th EIW estimates installing 4 sites per month
 - GATR and Radio-only Sites will be done last



19-21 Nov

RCU Ops/Maintenance Overview

Operations

- Loading of KG-84/RCU Key Material
 - Confidential
 - -Handled through current channels (like KIR-1C)

Maintenance

- Equipment
 - -- KG-84 remove and replace at box level
 - •RCU remove and replace at circuit card level
- Maintenance terminal for diagnostics
- Minimal soldering requirements

Preventative Maintenance

- change/clean external filters
- remove/replace 9 volt battery

Training Requirement

- JSS
 - SAOC Requirements (AF)
 - · Operator Training
 - System Administration
 - Field Maintenance
 - Remote Radar Requirements (FAA)
 - · Limited Operator/Field Maintenance/Training
 - Accomplished during installation

19-21 Nov

Training Plans

- Training Planning Meeting......28 Oct 96
 - AETC will develop paper based (STP) training materials based on Motorola provided courseware
 - ACC/1AF will use the STP's to train FAA technicians during site installation
 - FAA involvement with AETC (STP development) is necessary
 - Future goal is to transfer to CBI packages from the STPs for attrition training

Training Allocation, 6 Slots

| Jan/Feb (6) | Sys Admin | Operator | Field Main | Depot Main |
|-------------|-----------|----------|------------|------------|
| - SA-ALC | 1 | 1 | · 1 | 1 |
| - AETC | 2 | 2 | 2 | 2 |
| - 38EIW | 1 | 1 | 1 | 1 |
| - Hughes | 2 | 2 | 2 | 2 |
| – Total | 6 | 6 | 6 | 6 |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

19-21 Nov

Training Allocation, 10 Slots

| Mar/Apr (10) | Sys Admin | Operator | Field Main | Depot Main |
|--------------|-----------|----------|------------|------------|
| - SA-ALC | 3 | 3 | 3 | 3 |
| - 932nd | 2 | 2 | 2 | 0 |
| ~ 1AF | 6 | 6. | 6 | 0 |
| – FAA | 0 | 0 | 0 | 0 |
| - AETC | 1 | 1 | 1 | 1 |
| - 38EIW | 2 | 2 | 2 | 0 |
| – Total | 14 | 14 | 14 | 4 |
| | | | | |
| | | | | |

Training Allocation, 6 Slots

| Jan/Feb (6) | Sys Admin | Operator | Field Main | Depot Main |
|-------------|-----------|----------|------------|------------|
| - SA-ALC | 1 | 1 | · 1 | 1 |
| - AETC | 2 | 2 | 2 | 2 |
| - 38EIW | 1 | 1 | 1 | 1 |
| - Hughes | 2 | 2 | 2 | 2 |
| – Total | 6 | 6 | 6 | 6 |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

19-21 Nov

Training Allocation, 10 Slots

| Mar/Apr (10) | Sys Admin | Operator | Field Main | Depot Main |
|--------------|-----------|----------|------------|------------|
| - SA-ALC | 3 | 3 | 3 | 3 |
| - 932nd | 2 | 2 | 2 | 0 |
| ~ 1AF | 6 | 6. | 6 | 0 |
| – FAA | 0 | 0 | 0 | 0 |
| - AETC | 1 | 1 | 1 | 1 |
| - 38EIW | 2 | 2 | 2 | 0 |
| – Total | 14 | 14 | 14 | 4 |
| | | | | |
| | | | | |

JOINT USE SITE CONFIGURATION ATTACHMENT 11

JOINT USE SITE CONFIGURATION CONTIGUOUS US (AS OF NOV 96)

RADAR SITES WITH MODE 4 AND RADIOS

Oilton Ft Fisher Cross City Salem Houston/Ellington/Morales North Truro Whitehouse Crescent City/Klamath Makah Patrick/Melborne Riverhead/Suffolk Ft Lonesome/Ft Green Tyndall/Panama City* Bucks Harbor Oceana** Paso Robles/Black Mtn Slidell/New Orleans Mt Laguna

Mill Valley Jedburg Key West San Clemente Island** Lake Charles Tamiami

NOTES:

* Radios maintained by USAF

** Radios maintained by USN

RADAR SITES WITH RADIOS ONLY - GATR SITES

Andrews/Odessa Remsen/Utica Silver City
Keno/Klamath Falls Malmstrom / Great Falls Watford City
Nashwauk El Paso Lakeside/Kalispell

JOINT USE DATA TIE SITES

The Plains/Wash DC Phoenix/Humbolt Mtn Empire
Citronelle/Grand Bay Dansville San Pedro
Sonora Canton/Detroit Trevose*

Caribou

NOTES:

* Active Sep 91. Temporary data tie until Gibbsboro changes to the ARSR-4 radar. Est Jan 97.

JOINT USE SITE CONFIGURATIONS ALASKA-HAWAII-GUAM (AS OF NOV 96)

USAF RADAR SITES WITH MODE 4 AND RADIOS

Barter Island Fort Yukon Oliktok Cape Lisburne Indian Mountain Point Barrow Cape Newenham King Salmon Sparrevon Cape Romanzof Kotzebue Tatalina Cold Bay Murphy Dome Tin City Santa Rosa* Mt Kaala**

Note: Galena will retain limited UHF/VHF radio capability. Point Lay will not retain operational radio capability.

RADAR SITES WITH HFR, MODE 4 AND RADIOS

Mt Kokee

Note: Height Finder has been turned off pending installation of FPS-117 Radar.

JOINT USE DATA TIE SITES WITH RADIOS

Kenai St Paul* Shemya Island* Point Lay* * Beacon only site

JOINT USE DATA TIE SITES

Biorka*
Middleton Island*

*Beacon only site

^{*} FAA Owned

^{**}FAA Owns Search. Height Finder has been turned off pending installation of the ARSR-4 Radar.

JOINT USE SITE CONFIGURATIONS ALASKA-HAWAII-GUAM (AS OF NOV 96)

USAF RADAR SITES WITH MODE 4 AND RADIOS

Barter Island Fort Yukon Oliktok Cape Lisburne Indian Mountain Point Barrow Cape Newenham King Salmon Sparrevon Cape Romanzof Kotzebue Tatalina Cold Bay Murphy Dome Tin City Santa Rosa* Mt Kaala**

Note: Galena will retain limited UHF/VHF radio capability. Point Lay will not retain operational radio capability.

RADAR SITES WITH HFR, MODE 4 AND RADIOS

Mt Kokee

Note: Height Finder has been turned off pending installation of FPS-117 Radar.

JOINT USE DATA TIE SITES WITH RADIOS

Kenai St Paul* Shemya Island* Point Lay* * Beacon only site

JOINT USE DATA TIE SITES

Biorka*
Middleton Island*

*Beacon only site

^{*} FAA Owned

^{**}FAA Owns Search. Height Finder has been turned off pending installation of the ARSR-4 Radar.

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JOINT USE SITE DATA TIES/SERVICES

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| | NE AD Sector | *Boston | | 3 HQ | L/6 | Bricks Harbor | ı | 1 |
| | | | | | | | | l |
| | Canada East Sector | | | | <u> </u> | | - | † |
| | NE AD Sector | *Cleveland | | | 0/0 | Canton/Detroit | | - |
| | SE AD Sector | *Houston | | | 0/0 | Citronelle | 3 | + |
| 5 1,00 | | 1 111 04 | | | 7107 | (Grand Bay) | ' — | 1 |
| 30th Space Wing | WA D Sectors | *Oakland | · · · · · · · · · · · · · · · · · · · | | 12/1 | Crescent City | b | |
| | | Seattale | (000)(10)(1) | | *,0 | | | 1 |
| | SE AD Sector | *Jacksonville | 1 (UHF-USCS) | 3 HØ | l/6 | Cross City | ç | ~ |
| | | Miami | | | | | | 7 |
| | | *Cleveland | | | | | | ~ |
| | | Boston | | | | | | - |
| DOIA | W AD Sector | eupreupud!A* | 1 (UHF-USCS) | 2 HQ | L/ V | El Paso | 7 | 1 |
| | | | 2 (VHF-USAF) | | | | | 1 |
| | NE AD Sector | *Minneapolis | | | 0/0. | Empire | 8 | ٦ |
| | | Сһісадо | | | ,,,, | | | 1 |
| | W AD Sector | *Minneapolis | | | 1/21 | Finley | | - |
| | SE AD Sector | *Washington | 1 (UHF-USCS) | 3 HQ | 1/6 | Ft Fisher | 10 | |
| | | | 1 (UHF-NAVY) | | ······································ | <u> </u> | | |
| | | | 1 (VHF-UAVY) | | | | <u></u> | |
| САКІВКОС | SE AD Sector | imsiM* | 1 UHF-USCS) | 3 HQ | 1/6 | Ft Lonesome | 11 | - |
| | | | 2 (VHF-USAF) | | 7, | | <u> </u> | 7 |
| | SE/WAD Sectors | uojsnoH* | 1 (UHF-USCS) | 3 HQ | 1/1 | Houston | 21 | - |
| | | | 2 VHF-USAF) | | | (Filington) | <u> </u> | - |
| FACSFAC | SE AD Sector | *Jacksonville | 1 (UHF-USCS) | 3 HQ | 1/6 | Jedburg | | - |
| САКІВКОС | SE AD Sector | imsiM* | 1 (UHF-USCS) | 3 HQ | 1/6 | Key West | Þι | 1 |
| Mavy TARPON and | | | | | | | | |
| DAICC MARCH AFE | 000011 | 1 1 1 1 1 | | 01107 | | -171 44 | 3, | - |
| FACSFAC/PMRF | нвосс | nlulonoH* | | 10 HQ | 12/0 | Mt Kaala | | - |
| FACSFAC/PMRF | ни | ninionoH* | | DH 9 | 8/8 | Mt Kokee | | - |
| | M AD Sector | *Seattle | | | L/b | Klamath Falls | <i>J</i> 1. | - |
| | Canada East Sector | | | | | (Keno) | | |
| | V AD Sector | *Salt Lake | | | 1/2 | Lakeside | 81 | |

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6430.2 CHG 38 Appendix 80

| | Α | В | С | D | E | F | G | Н |
|----|----|-------------|----------------------|------|--------------|--------------|----------------|-----------------------|
| 33 | | (Kalispell) | | | | | | |
| 34 | 19 | Makah | 9/2* (NWADS) | 3 HQ | 2 (UHF) | | | |
| 35 | | | 2/0 (C ROCC) | | 2 (VHF-USN) | *Seattle | W AD Sector | Whidbey Isl FACSFAC |
| | | | *ATCC/Guard and | | | | | |
| | | | mutil channel shared | | | | | |
| 36 | | *ATCC | by 3 agnecies | | | | | |
| 37 | 20 | Malmstrom | 12/1 | | | Salt Lake | W AD Sector | |
| | ~ | Tamaimi | | | | | | |
| 38 | 21 | (Richmond) | 9/1 | 3 HQ | 2 (VHF-USAF) | Miami | SE AD Sector | CARIBROCC |
| 39 | 22 | Mica Peak | 8/1 | | | *Seattle | W AD Sector | Whidbey Isl FACSFAC |
| 40 | | | | | | | | Vancouver Canada |
| 41 | | | | | | | | ARTCC |
| 42 | 23 | Nashwauk | 6/1 | | | *Minneapolis | NE AD Sector | |
| | | | | | | | | 30th Space Wing San |
| 43 | 24 | Mill Valley | 9/1 | | 2 (VHF-USAF) | *Oakland | W AD Sector | Diego FACSFAC |
| 44 | 25 | Mt Laguna | 9/1 | 3 HQ | 1 (UHF-USCS) | *Los Angeles | W AD Sector | DAICC |
| 45 | | | | · | 2 (VHF-USAF) | | | San Diego FACSFAC |
| 46 | 26 | Nashwauk | 6/1 | | | *Minneapolis | NE AD Sector | |
| | | | | | | *Boston, New | | |
| | | | | | | York, | | |
| 47 | 27 | North Truro | 9/1 | 3 HQ | | Washington | NE AD Sector | VACAPES FASFAC |
| | | | | | | | Washington Ctr | DAMNEC VACAPES |
| 48 | 28 | Oceana | 9/2 (USN Maintained) | 3 HQ | 1 (UHF-USCS) | Washington | NE AD Sector | FACSFAC |
| | | | | | | **Ft Worth | | |
| 49 | 29 | Odessa | 4/1 | 3 HQ | 1 (UHF-USCS) | Albuquerque | W AD Sector | DAICC |
| | | | | | · | | | |
| 50 | 30 | Oilton | 4/1 | 2 HQ | 2 (VHF-USAF) | | | |
| 51 | | | | | 1 (UHF-USCS) | | | |
| | | | | | | | | 30th Space Wing/DAICC |
| 52 | 31 | Paso Robles | 9/1 | 3 HQ | 1 (UHF-USCS) | *Los Angeles | W AD Sector | San Diego FACSFAC |
| 53 | | | | | 2 (VHF-USAF) | *Oakland | | R2508 System |
| | | | | | | | | |
| 54 | 32 | Patrick | 9/1 | 3 HQ | 1 (UHF-UCSC) | *Miami | SE AD Sector | Jacksonville FACSFAC |
| 55 | | | | | | Jacksonville | | 45 Space Wing |
| 56 | 33 | Phoenix | 0/0 | - | 2 (UHF-FAA) | Los Angeles | | Tucson Arizona |
| 57 | | (Humboldt) | | | 1 (UHF-USCS) | | | |

JOINT USE SITE DATA TIES/SERVICES

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| | | | O ARTCC | CONTROLLIN | * | | | 98 |
| | and the same of th | Cleveland | | | | | | 78 |
| | NE AD Sector | Boston | | | | YM əllivznsQ | | 13 |
| | SE AD Sector | | 1 (UHF-USCS) | 2 HQ | 1/7 | Lake Charles | _ | 21 |
| · | | | 9 | EPLACED 92-9 | RADAR REMOVED /RE | Gibbsboro | 97 | L |
| Jacksonville FACSFAC | | | 2 (VHF-USAF) | | | | | 01 |
| Jacksonville ARTCC | SE AD Sector | *Jacksonville | 1 NHF-USCS) | 3 HQ | 1/6 | Whitehouse | 77 | 6, |
| | | Salt Lake | | | | | | 8 |
| Salt Lake City ARTCC | VA AD Sector | *Minneapolis | | | 1/9 | Watford | 43 | L |
| 81 RCS Corridor | SE AD Sector | *Jacksonvile | 1 (UHF-USCS) | H & | 9/2 (JSAF Maintained) | Tyndall | 45 | 9. |
| | | Albuquerque | | | 30317 6/0 | | | 9, |
| | | Ft Worth | | | | | | 7 |
| | W AD Sector | *Houston | | | 0/0 | Sonora | 17 | ε, |
| | SE AD Sector | "Houston | 1 (NHE-Nece) | 2 HQ | 1/4 | Slidell | 07 | 7. |
| DAICC | | | | | | | | 1. |
| San Diego FACSFAC | V AD Sector | •Albuquerque | 1 (UHF-USCS) | 2 HQ | L/b | San Pedro | 38 | 0, |
| DAICC San Diego | N AD Sector | *Los Angeles | 1 (NHF-ESCS) | | 0/0 | San Pedro | 38 | 6 |
| | | | | | 2/0 (30th Range Group | | | 8 |
| 30th Space Wing | W AD Sector | *Seattle | | 3 HQ | 1/6 | Salem | 37 | 4 |
| | | Washington | | | | | | 9 |
| | | *Boston | | | | (Suffolk) | | S |
| VACAPES FACSFAC | NE AD Sector | *New York | 4-1 (VHF-USN) | 3 HQ | L/6 | Riverhead | 36 | 7 |
| | | Cleveland | 3 (VHF-FAA) | | | | | 3 |
| | NE AD Sector | *Boston | 2 VHF-FAA) | | | | <u> </u> | 7 |
| | | Tech Center | 3 (UHF-FAA) | | 1/9 | Remsen (Utica) | 35 | L |
| | | New York | 11 12 21 11 17 0 | | 7.0 | | | 0 |
| | NE AD Sector | *Washington | | | 0/0 | The Plains | 34 | 6 |
| | | | (AAH-HAV) 1 | | J | | <u> </u> | 8 |
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TELECOMMUNICATIONS ROOM CONFIGURATION

ATTACHMENT 13

TELECOMMUNICATIONS ROOM CONFIGURATION

ATTACHMENT 13

DOD /FAA JOINT RADAR PLANNING GROUP 1996 FORMAL MEETING **COMMUNICATIONS SUB-GROUP CO-CHAIRMEN**

MR. ED WORMLEY HQ ACC/SCCJ

MR. SAMPATH KRISHNAN **HQ FAA/AOP-400**

DSN 574-4439/ CMCL (757) 764-4439 (202) 863-7325

WORMLEYE@HQACCSC.LANGLEY.AF.MIL SAMPATH_KRISHNAN_AT_AOP400_@MAIL.HQ.FAA.GOV



TELECOMMUNICATIONS ROOM CONFIGURATION

- INSUFFICIENT SPACE AVAILABLE FOR **UNCONTROLLED CONFIGURATIONS**
- NEW SITES DESIGNED FOR 105 SQ FT (7'x15')
 - SUPPORTS INSTALLATION OF 6 20" RACKS (4 - USAF, 2 - FAA)
 - ADEQUATE WORK SPACE BEHIND/ IN FRONT OF **RACKS**
- LAYOUT NEEDED FOR ALL SITES
 - COMPLETED FOR NEW SITES
 - TO BE DEVELOPED FOR EXISTING SITES



WAIVER OF AISLE SPACE REQUIREMENT



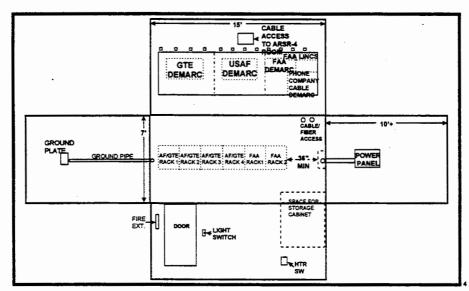
Per ANS 510 Memorandum, October 11, 1995:

- FAA / ANS 510 (INDUSTRIAL HYGIENNIST, ENVIRONMENTAL COMPLIANCE, AND EMPLOYEE SAFETY TEAM) RULING:
 - SINCE ALL WIRING IN RACKS AND CABINETS IS INSULATED, 36" AISLE SPACE NOT REQUIRED
 - 30" IS SUFFICIENT



ARSR-4 TELECOMMUNICATIONS ROOM PREFERRED STANDARD LAYOUT







CONFIGURATION EXISTING SITES



- SPACE AVAILABLE VARIES
- PLAN NEEDED FOR EACH SITE
 TO ENSURE ALL EQUIP FITS AND
 WORK SPACE IS ADEQUATE
- SOME SITES WILL NEED ADDED SPACE CONSTRUCTED TO MEET REQUIREMENTS



FIBER OPTIC / MICROWAVE INSTALLATION



- SOME SITES NOT ACCESSIBLE BY CABLE;
 MICROWAVE OR SATELLITE WILL BE REQUIRED
- TELEPHONE COMPANIES REPLACING CABLE WITH FIBER
- FIBER, MICROWAVE AND SATELLITE REQUIRE ADDED TERMINAL EQUIP = SPACE IMPACT
 - FAATSAT AND MW WILL BE SERIOUS CHALLENGES
- NEED TO CONTACT VENDOR TO DETERMINE SPACE REQUIREMENTS



ARSR-4 TELECOMMUNICATIONS ROOM CONFIGURATION CHECKLIST

VISIT:

- 1. OBTAIN SCHEDULE FOR INSPECTIONS (PIL WAIKTHRUEIC)
 2. OBTAIN SITE CLEARANCES / GET DIRECTIONS TO SITE
 3. VERIFY SITE READY FOR TELCO ROOM LAYOUT

 OR THE STATE OF THE STATE
- 4. DETERMINE TYPE OF TELECOM ACCESS PROVIDED:

AT SITE:

- 1. LOCATE CABLE RUN / ACCESS POINT TO TELCO ROOM 2. MATCH BACK WALL TO CABLE ENTRY
 3. MEASURE AND RECORD DIMENSIONS/POSITIONS OF:
- - INSTALLED EQUIPMENT, RACKS
 CABLE, POWER AND GROUND ACCESS/DUCTS
- 4. MARK RACK, DEMARC, ETC POSITIONS WITH TAPE
- 5. DOCUMENT ABOVE WITH "TO SCALE" DRAWING
 6. PHOTOGRAPH BACK WALL AND AREAS OF INTEREST
- TO DOCUMENT EQUIPMENT POSITIONS, ETC.

 PROVIDE DRAWING TO SITE CHIEF
 EXPLAN LAYOUT, DEMARC POSITIONS, MARKINGS
 DISCUSS RESOLVE ISSUES RE: SPACE ALLOCATION
 DENTIFY SECURITY ISSUES / SOLUTIONS
- 8. VISIT LOCAL CABLE / TELEPHONE PROVIDER TO RESOLVE ANY ISSUES (COORDINATE VISIT W/ FAA)

- 1. PREPARE DETAILED "TO SCALE" DRAWING IN **ELECTRONIC FORMAT**
- 2 TRANSMIT DRAWINGS TO AIR DEFENSE SECTORS, SITE CHIEF, HQ FAA AND OTHERS AS APPROPRIATE
- 3. CREATE FILE ON EACH SITE AND ITS ISSUES/STATUS
- 4. FOLLOW UP TO ENSURE RESOLUTION OF PROBLEMS AND CONFLICTS





TELCO ROOM DRAWINGS



"AS BUILT DRAWINGS DONE FOR EACH TELECOMMUNICATIONS ROOM

- DRAWINGS ARE "TO SCALE" AND SHOW EXACT **MEASUREMENTS**
- **ALL INSTALLED EQUIPMENT AND FIXTURES ARE** DOCUMENTED
- SPACE CONFLICTS AND SAFETY CONCERNS **ARE SHOWN**
- DRAWINGS DONE IN VISIO 3.0
 - **CAN BE CONVERTED TO POWER POINT**
 - CAN BE E-MAILED UPON REQUEST



- DOCUMENT DEVELOPED TO ADDRESS:
 - INTRODUCTION BACKGROUND / SCOPE
 - TELECOMMUNICATIONS ROOM REQUIREMENTS
 - ROOM IMPLEMENTATION ISSUES
 - KEY ORGANIZATIONS AND PERSONNEL
 - SITES AND IMPLEMENTATION SCHEDULE
 - STANDARD TELCO ROOM CONFIGURATION
 - EQUIPMENT FLOOR PLAN LAYOUTS
- **DRAWINGS FOR EACH SITE WILL BE ATTACHED**



SUMMARY



- **STANDARD LAYOUT FOR NEW FACILITIES**
 - BASED ON DESIGN & CONFIGURATION AUDITS
 - OBTAINED 30" CLEARANCE/ WORK SPACE WAIVER
 - SEVERAL SITES HAVE PROBLEMS THAT MUST BE CORRECTED TO PERMIT PROPER INSTALLATION
- ENSURE MAXIMUM UTILIZATION OF FLOOR / WALL SPACE
- ◆MUST ADDRESS EXISTING FACILITIES ON CASE-BY-CASE BASIS
 - SOME WILL NEED MODIFICATION/ADDITIONS
- ◆MICROWAVE / FIBER / FAATSAT TERMINAL SPACE ISSUES MUST BE RESOLVED



- DOCUMENT DEVELOPED TO ADDRESS:
 - INTRODUCTION BACKGROUND / SCOPE
 - TELECOMMUNICATIONS ROOM REQUIREMENTS
 - ROOM IMPLEMENTATION ISSUES
 - KEY ORGANIZATIONS AND PERSONNEL
 - SITES AND IMPLEMENTATION SCHEDULE
 - STANDARD TELCO ROOM CONFIGURATION
 - EQUIPMENT FLOOR PLAN LAYOUTS
- **DRAWINGS FOR EACH SITE WILL BE ATTACHED**



SUMMARY



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- ◆MICROWAVE / FIBER / FAATSAT TERMINAL SPACE ISSUES MUST BE RESOLVED

SECURITY STANDARDS FOR ARSR-4 SITES ATTACHMENT 14



6430.2 CHG 38 Memorai

Subject: ACTION: Reduced Watch Criteria for ARSR-4

Date:

AUG

5 1996

From: Manager, FAA Security Division, ACP-300 Manager, Internal Security Division, ACO-400 Reply to

Spence

Attn. of: 202-267-8286

FAX:267-5359

To: Managers, Civil Aviation Security Divisions, -700's Manager, William J. Hughes Technical Center, Civil Aviation Security Staff, ACT-8 FAA Co-Chairman, Joint Radar Planning Group (JRPG), AFR-304

1. References:

- a. ARSR 4 Program Office Memorandum subject: Physical Security Design Criteria for FAA/Air Force Radar Replacement (FARR) Program, dated July 19, 1989.
- b. Document, undated, subject: Ground Rules for Reduced Watch at Selected Joint Use Sites, Protective Criteria.
- Memorandum, from ACP-300 and ACO-400, to Managers, Civil Aviation Security Divisions, -700's, Manager, William J. Hughes Technical Center, Civil Aviation Security Staff, ACT-8, FAA Co-Chairman Joint Radar Planning Group (JRPG) subject: ARSR-4 Physical Security, dated July 18, 1996.
- 2. In order to dispel any confusion concerning the security procedures required for ARSR 4 sites vis-a-vis procedures required currently for other Joint Surveillance System (JSS) locations, the following guidance is effective immediately: "The security ground rules for reduced watch that are currently in effect for ARSR 3 and older JSS sites may be employed at ARSR 4 sites for so long as the ARSR 4 sites are operated at reduced watch. Reduced watch is defined in reference 1.c., above as meaning that FAA personnel are assigned on-site for less than 24 hours a day and less than 7-days a week." The term "assigned on-site" for the purpose of JSS/ARSR reduced watch security procedures means that: "An FAA employee is required to be physically present at the specific JSS/ARSR location not less than one time each week."
- 3. Prior to the implementation of any change that results in an ARSR 4 facility staffing becoming less than what is defined above as reduced watch the facility shall meet all prescribed ARSR 4 requirements. For purposes of physical security "JSS/ARSR sites", shall be understood to include all buildings, structures, and ancillary equipment that are located within the perimeter fence of each location.

David C. McFadden

FOR OFFICIAL USE ONLY (Public availability to be determined under 5 USC 552)

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ATTACHMENT JRPG ARSR 4 SITE PHYSICAL SECURITY STANDARDS REVISION

SECURITY STANDARDS FOR ARSR 4 SITES

1. GENERAL

This attachment contains changes, revisions, and additions to the Physical Security Design Criteria for ARSR 4 Sites, dated May 10, 1989. The original document remains in effect with the exception of the areas noted below. The additions, changes, and definitions in this document are effective immediately and are applicable under all staffing conditions. Original design standards should be modified to reflect the changes in this attachment. These revisions and additions will be incorporated into the next revision of FAA Order 1600.6C.

2. REFERENCES:

- a. The basic reference order for physical security standards for all FAA facilities is FAA Order 1600.6C, Physical Security Management Program (PSMP), dated April 1993.
 - b. Physical Security Design Criteria for ARSR 4 Sites, dated May 1989.

DEFINITIONS, CHANGES, AND ADDITIONS

3. STAFFING DEFINITIONS.

- a. Staffed facility means that FAA personnel are assigned on-site 24-hours a day, 7-days a week.
- b. Reduced watch means that FAA personnel are assigned on-site for less than 24-hours a day and less than 7-days a week.
- c. <u>Unstaffed</u> means that the facility does not have FAA employees assigned on-site. Employees are assigned responsibility for the facility but they normally make on-site visits on an "as required" or "as directed" basis.

4. TELEPHONE LINE SUPERVISION.

Delete reference b paragraph A.2.d, Section II Area Security, "Class A line supervision."

5. TELCO ROOM.

Delete requirement in reference b paragraph B.1.b.(4) for a "second lock and additional heavy duty hasp secured by a Best padlock," on the exterior door to the TELCO Room.

6. PERIMETER FENCE.

Revise reference b Section I, paragraph A, to read as follows:

"In accordance with requirements specified in Appendix 5, reference a., perimeter fence construction at ARSR 4 sites shall provide for a taut reinforcing wire a minimum of 9-gauge installed and interwoven with or affixed with 12-gauge fabric ties spaced 12-inches (0.304 meter) apart along the top and bottom of the fence fabric. Use of a top rail is not authorized for new fence construction. This requirement does not apply to perimeter chin link fences which are already constructed and have used a top rail instead of a taut wire until such time as the fence is replaced."

ATTACHMENT JRPG ARSR 4 SITE PHYSICAL SECURITY STANDARDS REVISION

7. EXTERIOR DOORS.

Change reference b, page 3, paragraph B(3) to read as follows:

"In accordance with requirements specified in Appendix 7, paragraphs 2 and 3, reference a., hinges shall be located on the inside of the door, or otherwise installed so as to be inaccessible from the exterior side when the door is closed. If this is not possible, the hinges shall be installed so they cannot be removed by taking out the screws or so they will withstand the use of a chisel or similar cutting device. The hinge pins in exterior mounted hinges shall be welded, flanged, or otherwise modified in a manner approved by the Servicing Security Element (SSE) to prevent their removal."

8. LOCKING DEVICES.

Modify reference b, page 3, paragraph B(11) to read as follows:

"The principal access door to the facility shall be provided with a Group 1R, built-in, three position, dial type, changeable combination padlock with deadbolt extension and reinforced strike. (Reference a., Appendix 12, Section 3, paragraph 10.h.). The lock selected and the installation design shall be approved by the SSE before installation."

9. OTHER DOORS.

Modify reference b, page 4, paragraph b(3) to read as follows:

"The doors will be fitted with heavy-duty dead bolts having a minimum throw of the bolt of one inch into a reinforced strike."

10. RADAR DOME DOORS.

Modify reference b, page 5, paragraph 8, to read as follows:

"Locking devices that incorporate unique life-safety features such as the "Yale" safety locks on the doors to the radar dome are excluded from the general requirement for utilization of Best locking devices."

4/7/97

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